DOCUMENT RESUME

ED 200 811 CE 028 728

TITLE Performance Based Traffic Safety Education Course. Two-Phase Program.
INSTITUTION Washington State Board of Education, Olympia.
PUB DATE 79
NOTE 309p.

EDRS PRICE MF01/PC13 Plus Postage.
DESCRIPTORS Behavioral Objectives; *Competency Based Education; Decision Making; *Driver Education; High Schools; Learning Activities; Learning Modules; Maintenance; Motor Vehicles; Pedestrian Traffic; *Safety Education; Tests; *Traffic Accidents; Traffic Circulation; *Traffic Safety; Visual Aids

ABSTRACT

This course for high school highway traffic safety education is intended to help students learn to make good driving decisions. It consists of twenty-one modules--ten sequenced, two not in specific sequence but intended to be completed in the earlier part of the course, and nine non-sequenced modules. Each module begins with an outline providing this information: module objective, concepts, listing of both classroom and in-car student learning activities, and evaluation. Materials contained in the modules include student learning activity sheets, transparency masters, informational filers, evaluation/tests, and worksheets. Titles of the modules are (1) Introduction; (2) Preparing and Controlling the Vehicle; (3) Maneuvering in a Limited Space; (4) Intersections; (5) Traffic Flow; (6) Lane Changes; (7) Passing; (8) Critical Tasks, Vehicle Malfunction and Breakdowns, Avoiding or Minimizing Impact; (9) Application of Tasks to City and Freeway Environments; (10) Obtaining Your Driver's License; (11) Signs, Signals, and Pavement Markings; (12) Human Functions--Identification, Prediction, Decision, and Execution process; (13) Roadway Variations; (14) Limited Visibility, Lessened Traction; (15) Special Driving Conditions; (16) Vehicle Characteristics, Motorcycle Awareness, Non-Motorized Traffic; (17) Internal and Physical Factors, Alcohol and Other Drugs; (18) Vehicle Maintenance; (19) Planning for Travel; (20) Legal and Post Crash Responsibilities; (21) Individual Responsibilities and Opportunities, Fuel Conservation, System Improvement. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

CE

ED200811

PERFORMANCE BASED
TRAFFIC SAFETY EDUCATION COURSE
TWO-PHASE PROGRAM

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

F. Brouillet

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE 028 728

MODULE STRUCTURE FOR SAMPLE GUIDE AND COURSE (TWO PHASE)

May, 1979

	Sequenced Modules (Necessary that student meets classroom objectives, if any, before proceeding to BTW)	Formerly numbered in the Unit-Module structure developed in June in 1973 as Module(s):
1.	Introduction	1
2.	Preparing and Controlling the Vehicle	2
3.	Maneuvering in a Limited Space	3
4.	Intersections	10
5.	Traffic Flow	11
6.	Lane Changes	12
7.	Passing	13
* 8.	Critical Tasks, Vehicle Malfunctions and Breakdowns, Avoiding or Minimizing Impact	23, 24
* 9.	Application of Tasks to City and Freeway Environments	Not designated in 1973
** 10.	Obtaining Your Driver's License	Not designated in 1973
	Modules Not in Specific Sequence but to be Completed in the Earlier Part of the Course	
11.	Signs, Signals, and Pavement Markings	4
12.	Human Functions - IPDE	6, 7, 8
	Non-Sequenced Modules	
*** 13.	Roadway Variations	9
*** 14.	Limited Visibility, Lessened Traction	20, 21
*** 15.	Special Driving Conditions	22
16.	Vehicle Characteristics, Motorcycle Awareness, Non-Motorized Traffic	5, 14, Motorcycle Awareness not designated in 1973
17.	Internal and Physical Factors, Alcohol and Other Drugs	15, 16, 17
18.	Vehicle Maintenance	18
19.	Planning for Travel	19
20.	Legal and Post Crash Responsibilities	25, 26
21.	Individual Responsibilities and Opportunities, Fuel Conservation, System Improvement	27, Fuel Conservation not designated in 1973

* The conduct of these two modules may be reversed according to individual student and teacher scheduling needs.

** To be conducted at or near the end of the course.

*** The timing for these modules depend somewhat on the location of the high school and/or weather factors related to the time of year the course is being conducted.

March, 1979

MODULE 1: INTRODUCTION

OBJECTIVE

WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS ON THE HIGHWAY TRANSPORTATION SYSTEM, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

THE STUDENT WILL PARTICIPATE IN ACTIVITIES RELATED TO AN OVERVIEW OF THE COURSE.

CONCEPTS

Highway Transportation System: components, purpose, management, evaluation

Overview of the course: nature of the driving task, role of human functions, individual responsibilities and opportunities.

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ________________________, pp.__________.
2. In a classroom group setting, participate in a teacher-led exercise on student responsibilities, course content, scheduling, criteria for course completion, and student opportunities.
3. Independently complete enrollment forms supplied by teacher.
4. In a classroom group setting participate in a teacher-led exercise using overhead transparency set T1a on the Highway Transportation System.
5. Independently scan the contents of "__________________ School District Driving Task Procedures and Criteria" to discover the nature of driving tasks to be learned.
6. In a classroom group setting, view "Human Functions and Driving Task" (FS,C) and list the four functions with a brief description of each.

EVALUATION

1. Complete Evaluation E2 (after completion of classroom activities in Module 2.)

TEACHER-LED EXERCISE
(Student Learning Activity 2, Module 1)

(The following are suggested items to cover. Be sure to prepare what is specific for your school district in any of these items-- e.g., the school attendance policy).

Student Responsibilities

1. Get a driver's permit before you can drive. If you are not yet 15½, you must get a permission slip from the TSE teacher before the DOL will issue you a driver's permit.
2. Come to class every class day; if you have to miss, notify teacher.
3. Keep alert for your scheduled time in the car. If you have a conflict, notify the teacher as soon as the schedule is posted. DO NOT MISS YOUR DRIVING TIME.
4. Keep moving on work; if you wait too long to get started, it will be very difficult to finish. You are expected to pace yourself on work you are to do independently.
5. To complete the course, you must meet all of the objectives as stated in each section or part of the course, which are called modules.
6. You are expected to portray a mature attitude--in regard to the class, and to driving itself--(a) willing to make adjustments for others, tolerant, and courteous to others (b) accept relevant criticism (c) respect purposes and procedures to traffic laws and enforcement (d) develop realistic self image, know strengths and limitations and act accordingly.

Student Opportunities

1. You will be able to work mostly at your own pace. You are not expected to compete with others in this class.
2. Your progress will be charted for you.
3. Scheduling in the car will be done according to your completed classroom and independent work.
4. You will be helped to prepare for your license test at the Department of Licensing.
5. The door is always open to you to ask for help from the teacher.

TEACHER-LED EXERCISE
Transparency Set T1a

Transparency 1

Driving takes place in the HTS -- the following transparencies will help clarify what that means by defining system and HTS, by showing us what the objectives and components of the HTS are.

Transparency 2

This is basically what the course you are taking is for -- to help you learn how to make good driving decisions -- and what you need to make those decisions.

Transparency 3

Briefly describe for comparison the parts of one of the systems pictured (e.g. railroad: track, terminals, train itself, dispatchers, engineers).

Transparency 4

Basically the HTS is people moving vehicles over roadways -- note points made on the transparency itself.

Transparency 5

Self explanatory.

Transparency 6

Self explanatory.

Transparency 7

This is why a good deal of effort is made and a large amount of money is spent -- to try to overcome the problems that are making our highways not entirely safe.

TRANSPARENCY MASTER SET T1a
(Page 1 of 7 pages)

THE HIGHWAY TRANSPORTATION SYSTEM

Driving takes place in the

Highway Transportation System

---

define - - - **SYSTEM**

define - - - **HTS**

state - - - **SYSTEM OBJECTIVES**

classify - - - **SYSTEM COMPONENT**

TRANSPARENCY MASTER SET T1a
(Page 2 of 7 pages)

DEFINITION OF DRIVING

Driving an automobile consists of taking skilled and properly timed actions under varying road & traffic conditions

Based on Decisions

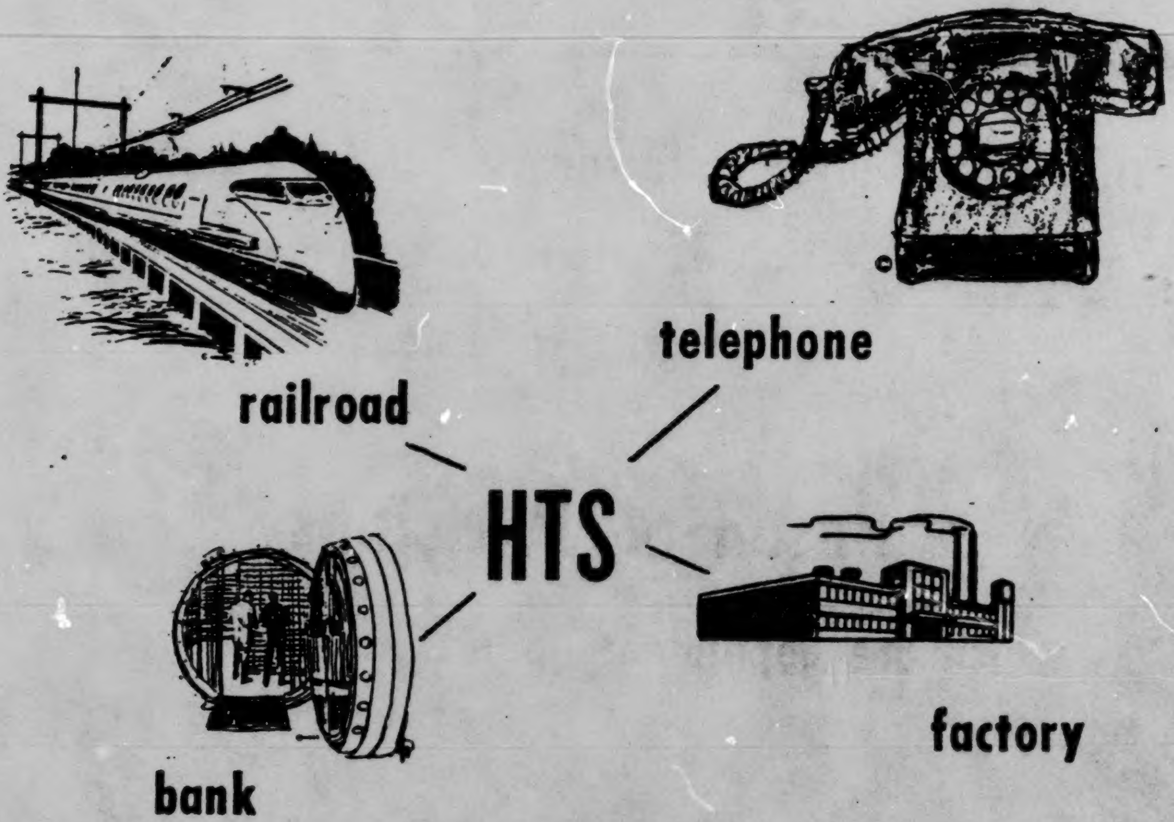
which are dependent upon . . .

- **SOUND JUDGMENT**
- **REALISTIC PERCEPTION**
- **LEARNED INFORMATION**

3/79

TRANSPARENCY MASTER SET T1a
(Page 3 of 7 pages)

SYSTEM



railroad

telephone

HTS

bank

factory

A SYSTEM IS AN ORDERLY ARRANGEMENT OF INTERACTING ELEMENTS DESIGNED TO ACHIEVE A SPECIFIC SET OF OBJECTIVES

HTS **HTS**

A Man-machine System

A subsystem of the National Transportation System-composed of numerous man- machine combinations

has -

- **a somewhat uniform network of communications**
- **a variety of regulated environment**
- **is extremely important to our**

Way of Life

TRANSPARENCY MASTER SET T1a
(Page 5 of 7 pages)

HTS **HTS** **HTS**

SYSTEM OBJECTIVES

●

The safe, efficient and convenient movement of people and goods from place to place

●

MAJOR COMPONENTS of HTS

- **MAN**

  People who use the system

- **MACHINE**

  Vehicles designed to be operated in the system

- **HIGHWAY**

  Environment in which vehicles can be operated by man

3/79

TRANSPARENCY MASTER SET T1a
(Page 7 of 7 pages)

HIGHWAY TRAFFIC SAFETY

A Serious Social & Economic problem.

Component Malfunctions

man • vehicle • highway

Consequences of HTS Failures

congestion • traffic accidents • economic costs

GOAL OF DRIVER EDUCATION

The development of traffic citizens who will be competent and responsible users of the Highway Transportation System

MODULE 2: PREPARING AND CONTROLLING THE VEHICLE

OBJECTIVE WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS ON THE PURPOSE AND MEANING OF THE DEVICES IN A VEHICLE THAT ENABLES THE DRIVER TO: CONTROL THE MOVEMENT OF THE VEHICLE, COMMUNICATE INTENTIONS TO OTHERS, SEE THE DRIVING ENVIRONMENT MORE EFFECTIVELY, AND PROTECT HIMSELF/HERSELF AND OTHER OCCUPANTS IN THE EVENT OF AN ACCIDENT, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

IN THE T.S.E. CAR, THE STUDENT WILL DEMONSTRATE THE CORRECT PROCEDURES FOR PREPARING THE VEHICLE BEFORE AND UPON ENTERING, FOR STARTING THE ENGINE, FOR STOPPING THE VEHICLE, AND FOR SECURING THE VEHICLE, USING THE PROCEDURES AS OUTLINED IN "________________ SCHOOL DISTRICT DRIVING TASK PROCEDURES AND CRITERIA." THE STUDENT WILL DEMONSTRATE THE ABILITY TO CONTROL THE VEHICLE SPEED BY ACCELERATING AND BRAKING AND TO CONTROL DIRECTION BY STEERING AND TURNING USING THE CRITERIA AS OUTLINED IN "________________ SCHOOL DISTRICT DRIVING TASK PROCEDURES AND CRITERIA."

CONCEPTS Identification, use, purpose, and/or meaning of: control instruments; gauges; communication instruments; visibility devices; safety devices.

Pre-entry checks outside car.
Pre-ignition procedures.
Starting the engine and preparing to move the car.
Accelerating the braking.
Steering and turning.
Stopping and securing the car.

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ____________________, pp.________.
2. In a classroom group setting, participate in a teacher-led discussion on identification, use, purpose, and/or meaning of instruments, gauges, and devices for preparing and controlling a vehicle using Informational Flyer IF2a.
3. In small groups of 3 or 4, study and recite to each other the procedures for pre-entry checks through turns in the "________________ School District Driving Task Procedures and Criteria."
4. During in-car instruction, practice application of procedures for preparing and controlling the motion of the vehicle as directed by the teacher.

EVALUATION

1. Complete Evaluation E2.
2. Demonstrate correct procedures as outlined in "____________ School District Driving Task Procedures and Criteria," at least once for each of the following: pre-entry checks, pre-ignition, starting and preparing to move the car, and stopping and securing the car.
3. Demonstrate speed and lane control as outlined in "____________ School District Driving Task Procedures and Criteria," for a specified time of 5 minutes.

March, 1979

INFORMATIONAL FLYER IF2a

Refer to diagrams in the textbook when reviewing the following items.

1. Foot Brake - used to stop car, vs. parking brake - used to hold car when stopped.
2. Accelerator - usually called gas pedal.
3. Gear Selector - usually called gear shift.
4. Speedometer - tells how fast you are going, vs. odometer - tells how many miles are on the car (people usually ask "What's the speedometer reading?" when technically they should ask "What is the odometer reading?").
5. Oil Pressure Light - now on great majority of cars rather than gauge. When it comes on during operation, it usually is a result of the oil being low, even though not actually a measure of the level of oil.
6. Alternator Light - on most cars now -- when it stays on during operation, need not stop driving immediately but should get to service garage as soon as possible.
7. Temperature Light - if temperature light comes on or gauge shows hot, vehicle should not be driven until problem is corrected.
8. Heater/Defroster - usually 3 controls: 1) regulates for temperature of air, 2) directs air on floor of car or on windshield, 3) fan switch for blowing different amounts of air.
9. Light Switch - halfway, parking and tail lights; full, headlights; twist right for control of instrument panel lights; twist full left for dome light.
10. Dimmer Switch - usually on left firewall to change from high to low beam headlight and vice-versa.

March, 1979

EVALUATION E2a

Directions: Write the letters of the correct answers on the separate answer sheet. A total of 4 points for Module One Objective and a total of 8 points for Module Two Objective is needed to pass.

(All questions 1 point each)

Module One Objective

1. The three major components of the Highway Transportation System are:
   a). Man, machine, highway.
   b). Driver, vehicle, decisions.
   c). Judgment, perception, information.
   d). Railroad, airplane, automobile.

2. The objective of the HTS is:
   a). Provide registrations for motor vehicles.
   b). Eliminate the driver error that causes the majority of accidents.
   c). Provide beginning drivers with courses.
   d). Provide safe and efficient movement of people and goods.

3. Which part of the HTS is responsible for most of the breakdowns in the system?
   a). Machines.
   b). People.
   c). Roadway.
   d). Engineering.

4. The primary goal of driver education is to:
   a). Provide students with a certificate in order that they can get their licenses.
   b). Develop drivers who will be capable and responsible.
   c). Teach laws and maneuvering of the vehicle such as lane changes and parallel parking.
   d). Prepare students for the Department of Licensing test.

5. Considerable effort is made promoting safety in the HTS because:
   a). There are an excessive number of malfunctions of the vehicles in that system.
   b). Highway engineering has not been able to keep up with vehicle engineering.
   c). There is a serious social and economic problem as a result of HTS failures.
   d). The driving records of drivers under 25 has not improved.

Module Two Objective

6. The alternator indicator lets a driver know:
   a). Oil pressure.
   b). If the vehicle is overheating.
   c). How much fuel is in the gas tank.
   d). If the battery is being charged.

7. When the temperature light comes on while a car is being driven, it means:
   - a). That the car has overheated.
   - b). That the driver should check the level of the coolant in the radiator.
   - c). That the cooling system is functioning properly.
   - d). That the fan belt is broken.

8. A driver checks the vehicles odometer to find out:
   - a). The distance a vehicle has been driven.
   - b). If the battery is being charged.
   - c). How fast a vehicle is moving.
   - d). If the lights are working properly.

9. The dimmer switch controls:
   - a). Headlights and tail lights.
   - b). The dimness or brightness of the instrument panel lights.
   - c). Headlights only.
   - d). Headlights and instrument panel light brightness.

10. The light switch for most vehicles:
    - a). Controls headlights, parking lights, and tail lights only.
    - b). Controls all lights except for brake lights and backup lights.
    - c). Is located to the right of the steering column.
    - d). Does not provide for control of the interior lights.

11. When a car is being driven and the oil pressure lights comes on and stays on:
    - a). The driver should not drive more than 25 miles.
    - b). It means the oil is low.
    - c). The driver should run the engine at fast idle 'till the light goes off.
    - d). The driver should move to the side of the road and stop.

12. In an automatic shift car the gear selector position for moving forward is usually:
    - a). F
    - b). D
    - c). N
    - d). L

13. The safety device in a car which will help prevent whiplash is commonly called:
    - a). Head rest.
    - b). Seat belt.
    - c). Air bag.
    - d). Collapsible steering column.

14. The brake warning light comes on when:
    - a). The brakes are worn and need replacing.
    - b). The brakes need adjusting
    - c). The parking brake is on.
    - d). When the brakes are overheating.

15. When the oil pressure and alternator lights go on when the ignition switch is in the "on" position prior to starting the engine:

a). It means the two systems should be checked for malfunction.
b). It means the engine is ready to start.
c). The purpose is for alerting the driver to possible trouble.
d). The purpose is to check if the lights are not burned out.

March, 1979

MODULE 3: MANEUVERING IN LIMITED SPACE

OBJECTIVE IN THE T.S.E. CAR, THE STUDENT WILL DEMONSTRATE THE SKILLS FOR MANEUVERING IN LIMITED SPACE, SAFELY, LEGALLY AND USING CORRECT PROCEDURES AS OUTLINED IN "________________ SCHOOL DISTRICT DRIVING TASK PROCEDURES AND CRITERIA."

CONCEPTS

Right and left turns.
Backing in a straight line and around a corner.
Turnabouts: U-turns, Y-turns, driveway turnabouts.
Parking: angle, perpendicular, incline and decline.
(Parallel parking, though actually a part of maneuvering in a limited space will be taken up in Module 5, Traffic Flow.)

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ____________________, pp.________.
2. In small groups of 3 or 4 study and recite the procedures for maneuvering in limited space in "______________ School District Driving Task Procedures and Criteria."
3. During in-car instruction, practice procedures for maneuvering in limited space as directed by the teacher.

EVALUATION

1. Demonstrate correct procedures once for each of the following: Right turn, left turn, U-turn, Y-turn, driveway turnabout same side of street, driveway turnabout opposite side of street, angle parking, perpendicular parking and incline and decline parking as outlined in "_________________ School District Driving Task Procedures and Criteria."

March, 1979

MODULE 4: INTERSECTIONS

OBJECTIVES

WHEN PRESENTED WITH A SET OF TRAFFIC SITUATION DIAGRAMS AND ACCOMPANYING QUESTIONS RELATED TO WHAT TO DO AT DIFFERENT TYPES OF INTERSECTIONS, THE STUDENT WILL RESPOND WITH 75% ACCURACY.

IN THE T.S.E. CAR, THE STUDENT WILL DEMONSTRATE THE ABILITY TO APPROACH, ENTER, AND EXIT VARIOUS TYPES OF INTERSECTIONS BOTH ON STRAIGHT PATHS AND TURNING PATHS. EVALUATION WILL BE BASED ON THE ABILITY TO "READ" THE INTERSECTION AND TO SELECT APPROPRIATE POSITIONS AND SPEEDS BASED ON CRITERIA IN "________________ SCHOOL DISTRICT DRIVING TASK PROCEDURES AND CRITERIA."

CONCEPTS

Correct approach and exit for two-way into two-way, two-way into one-way, one-way into two-way, one-way into one-way.
How to give and read clues about intended path of vehicles (communications).
Correct or compensate for obstructions to vision.
Position of car for turns, approaches, entry and exits of intersections.
Look for and take proper actions toward potential conflicts.
Conducting of search pattern at intersection.
Yielding right-of-way.
Choosing a gap.
Where to stop at intersections.

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ____________________, pp. ____________.
2. Independently complete Worksheets W4a, b, and c.
3. In groups of 3 or 4 recite to and quiz each other on procedures and criteria for negotiating intersections in "______________ School District Driving Task Procedures and Criteria."
4. During in-car instruction, practice intersecting in controlled and uncontrolled intersections, concentrating first on procedures, and then progressing to application of the Human Functions.

EVALUATION

1. Complete Evaluation E4.
2. Demonstrate procedurally correct approaches, entries, and exits at least two out of three times for each of the following:

   a) Proceeding straight through:
      1) uncontrolled intersections
      2) controlled intersections -- stop signs
      3) controlled intersections -- signal lights
   b) Turning:
      1) right from a multiple-lane street
      2) left from a multiple-lane street
      3) right onto a multiple-lane street
      4) left onto a multiple-lane street

   (1) through 4) may be done separately or in combinations. The multiple lane streets may be one-way or two-way).

March, 1979

WORKSHEET W4a
(Page 1 of 3 pages)

Directions: Study the information provided on the following pages and answer the questions at the end.

As you should be aware from the module on signs and signals and pavement markings, you are required to stop at intersections under a number of instances. The following is information on just where at various intersections you should stop your vehicle.

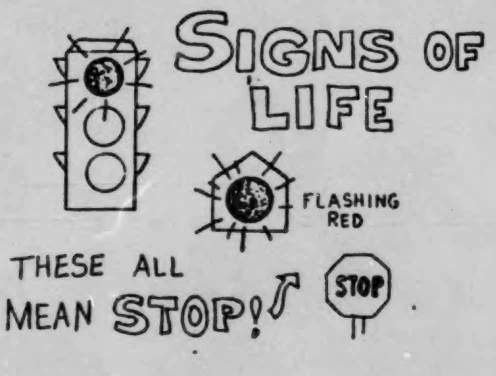
46.61.360 RCW

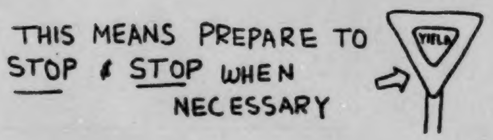
Except when directed to proceed by a police officer or traffic control signal, every driver of a vehicle approaching a stop intersection indicated by a stop sign shall stop before entering the crosswalk on the near side of the intersection, or, in the event there is no crosswalk, shall stop at a clearly marked stop line, but if none, then at the point nearest the intersecting roadway where the driver has a view of approaching traffic on the intersecting roadway.

When necessary to stop at a red signal light, at a red flashing, or at a yield sign if required for safety to stop, the same regulations apply as above for where to stop.

46.61.365 RCW

The driver of a vehicle within a business or residential district emerging from an alley, driveway, or building shall stop such vehicle immediately prior to driving onto a sidewalk or onto the sidewalk area extending across any alleyway or driveway, and shall yield the right-of-way to any pedestrian as may be necessary to avoid collision, and upon entering the roadway shall yield the right-of-way to all vehicles approaching on said roadway.




THIS MEANS PREPARE TO STOP & STOP WHEN NECESSARY
YIELD

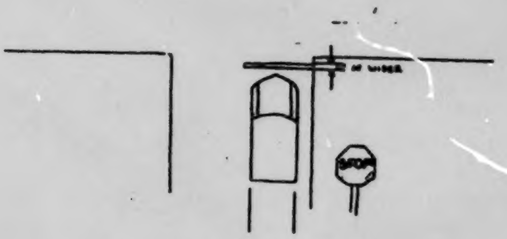
March, 1979

WORKSHEET W4a
(Page 2 of 3 pages)

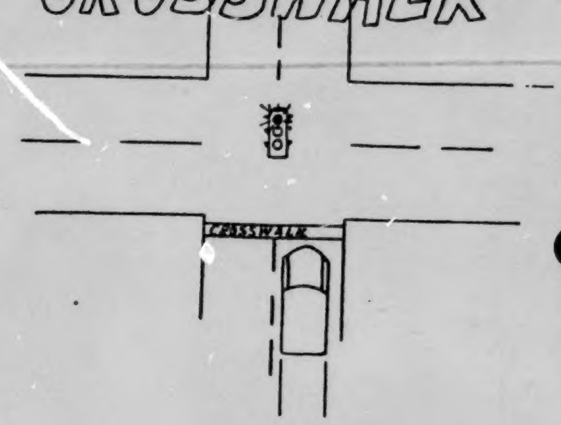
There are at least three places where you may be required to stop your vehicle at a gi[illegible]n intersection. These are the Stop Line, Behind the Crosswalk, and Behind the Curbline

STOP LINE

The Stop Line is a heavy white line from the curb to the center of the street or highway, and is at least six inches wide or wider. You must stop with your front bumper (car, truck, etc.) or front wheel (bike, motorcycle) BEHIND the stop line.



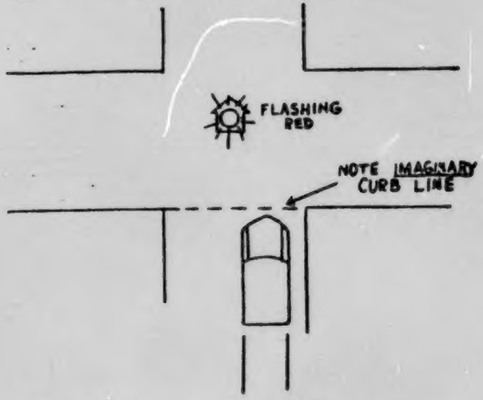
CROSSWALK



If there is a painted crosswalk, you must stop your vehicle with the front bumper (car, truck, etc.) or front wheels (bike, motorcycle, etc.) BEHIND the nearest crosswalk line.

On streets that have sidewalks, but no painted crosswalks, remember that the crosswalks are still considered to be there. Handle these situations just as you would if the crosswalk were painted.

CURB LINE



If there are no identifying pavement markings and the sign or traffic control device says stop, then you must stop with your front bumper (car, truck, etc.) or front wheel (bike, motorcycle, etc.) BEHIND an imaginary line called a Curb Line, which stretches from curb to curb closest to you. If there are no curbs present, then you must imagine where they would be, and stop at that imaginary curb line. REMEMBER! Your vehicle must not slow or impede the flow of traffic.

Sometimes you will be leaving a driveway, alley, or building area such as a gas stati[illegible] r drive-in. Your stop is made behind the sidewalk, and you will need to yield the right[illegible]-way to all persons approaching from either side on the sidewalk, and to all traffic approaching from both directions. When the way is clear, you may turn left or right, unless pavement markings or signs prohibit such a maneuver.

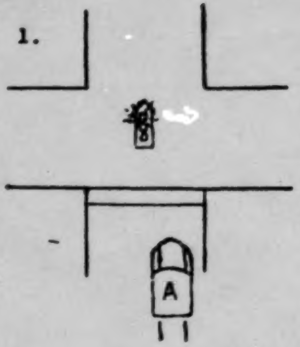
March, 1979

WORKSHEET W4a
(Page 3 of 3 pages)

INSTRUCTIONS TO STUDENT

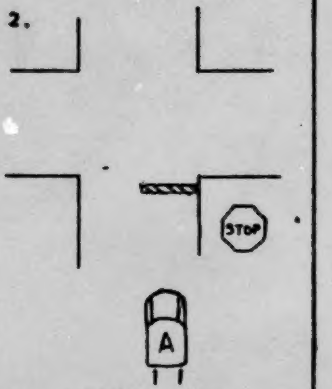
1. You are the Driver of Vehicle "A".
2. In each situation, where would you stop?
3. Place your choice of letter in the appropriate space on the right side of this sheet.

1.



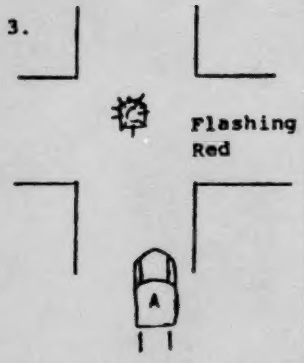
A. At Stop Sign
B. At Curb Line
C. Behind Crosswalk
D. At Stop Line
E. Under Light

2.



A. At Stop Sign
B. At Curb Line
C. Behind Crosswalk
D. At Stop Line
E. None of the above

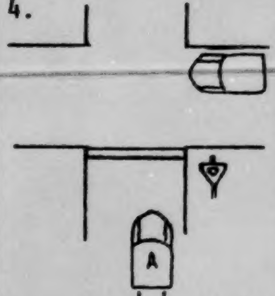
3.



A. At Stop Sign
B. At Curb Line
C. Behind Crosswalk
D. At Stop Line
E. Under Light

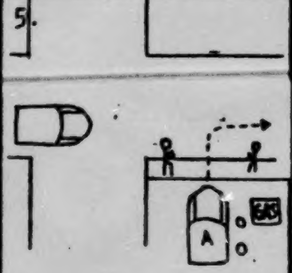
1. ____
2. ____
3. ____
4. ____
5. ____
6. ____
7. ____

4.



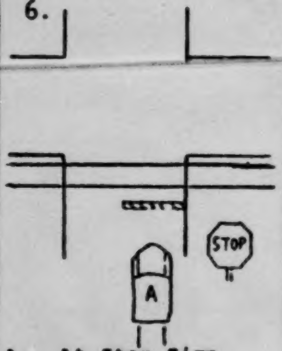
A. At Yield Sign
B. At Curb Line
C. Behind Crosswalk
D. At Stop Line
E. You are not required to stop

5.



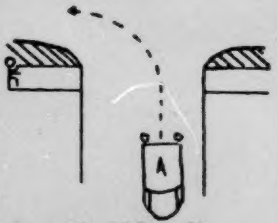
A. Sidewalk
B. At Curb
C. At Light
D. Both A & B
E. You are not required to stop

6.



A. At Stop Sign
B. At Curb Line
C. Behind Crosswalk
D. At Stop Line
E. At B, C or D

7.



A. At Sidewalk
B. At Curb Line
C. Within 15 ft. of curb
D. You don't have to stop
E. Both A & B

WORKSHEET W4b
(Page 1 of 4 pages)

LANE POSITION AT INTERSECTIONS

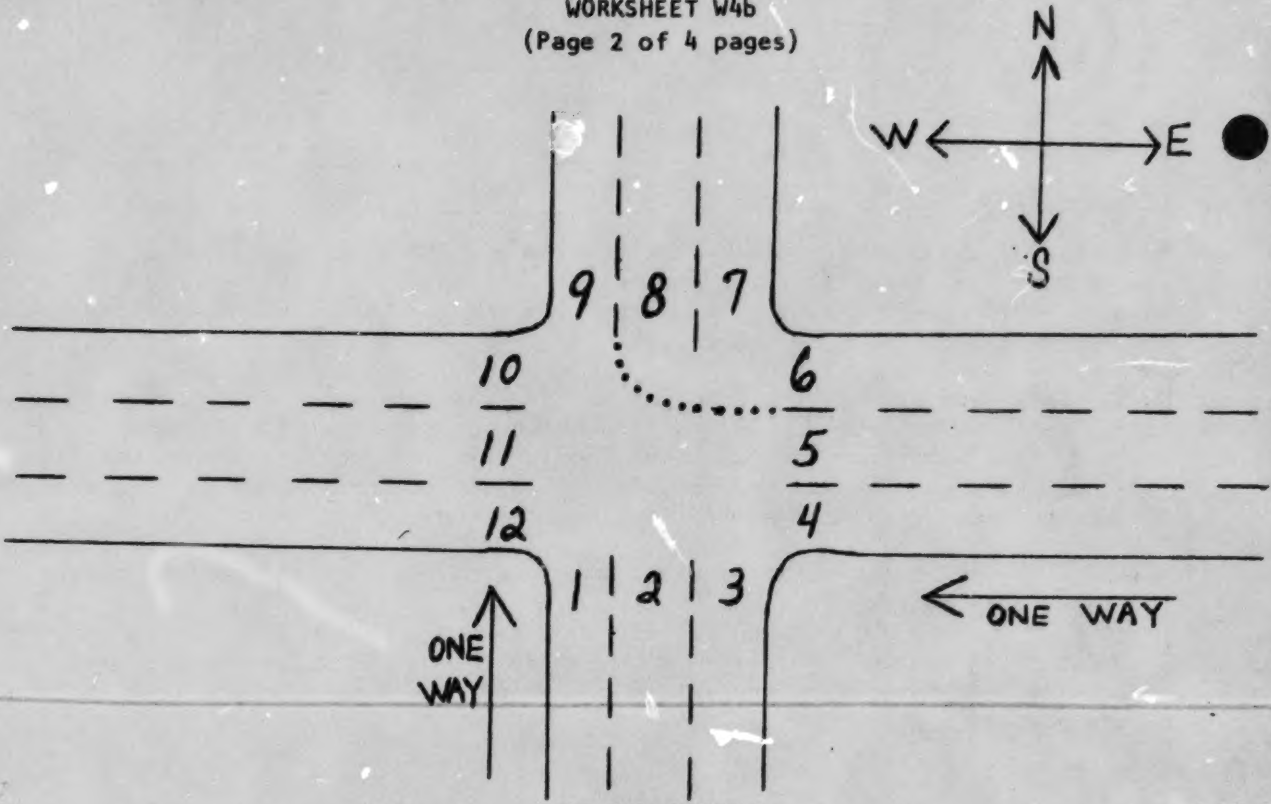
As a rule of thumb when you are turning from or into a multiple-lane street, you should make left turns from the furthest legal lane to the left into the furthest legal lane to the left, and right turns from the furthest legal lane right into the furthest legal lane to the right.

On multiple-lane streets where more than one lane is permitted to turn, you should turn into the same lane as the one from which you turned (e.g., if turning left from the 2nd legal lane from the left, you should turn into the 2nd legal lane from the left, and so on). However, you should follow the pavement markings if a different procedure is expected at a particular intersection.

North is always at the top of the diagram, making south at the bottom, west to the left, and east to the right.

After studying each of the diagrams on the following pages, answer the questions concerning them by placing the letter of the correct answer on the line in front of the number.

WORKSHEET W4b
(Page 2 of 4 pages)



ONE-WAY STREETS

_____1. You are going North and want to turn West. You should turn from which lane?
A. Lane 1 B. Lane 2 C. Lane 3

_____2. You are going North and want to go West. You should turn into which lane?
A. Lane 10 B. Lane 11 C. Lane 12

_____3. You are going West and want to go North. You should turn from which lane?
A. Lane 4 B. Lane 5 C. Lane 6

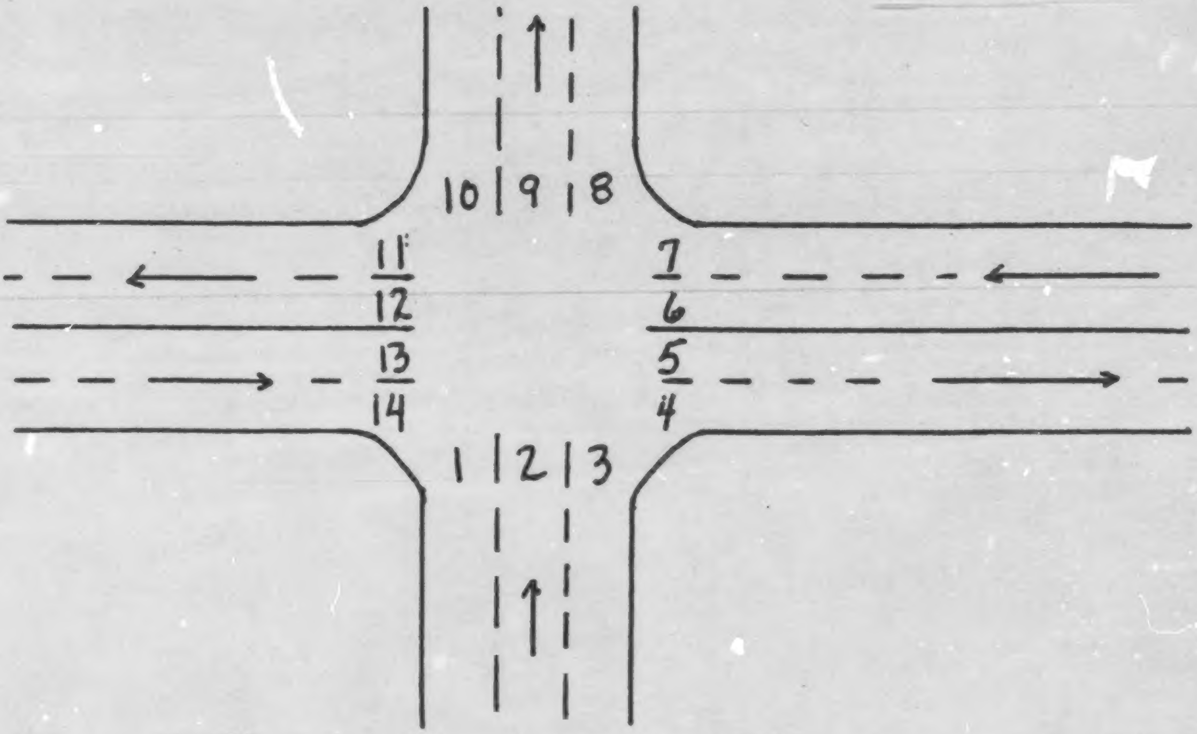
_____4. If you are traveling West, and want to turn North, you should turn into which lane?
A. Lane 7 B. Lane 8 C. Lane 9

_____5. You are in Lane 1, intending to turn West. The light turns red as you approach. You should:
A. Wait for a green light.
B. Stop, check traffic and turn, if clear.
C. Stop, then turn.
D. Make your turn on the red light without stopping.

_____6. If a left turn is permitted out of Lane 2, you should turn into which lane?
A. Lane 10 B. Lane 11 C. Lane 12

_____7. A right turn is permitted out of Lane 5. You should turn into which lane?
A. Lane 7 B. Lane 8 C. Lane 9

WORKSHEET W4b
(Page 3 of 4 pages)



TWO WAY - ONE WAY

_____1. You are traveling East, and want to turn North. You should turn into which Lane? A. Lane 8 B. Lane 9 C. Lane 10

_____2. You are traveling North, and want to turn West. You should turn from which Lane? A. Lane 1 B. Lane 2 C. Lane 3

_____3. You are traveling North, and want to turn West. You should turn into which Lane? A. Lane 11 B. Lane 12 C. Lane 13 D. Lane 14

_____4. You are traveling North, and want to go East. You should turn into which Lane? A. Lane 4 B. Lane 5 C. Lane 6 D. Lane 7

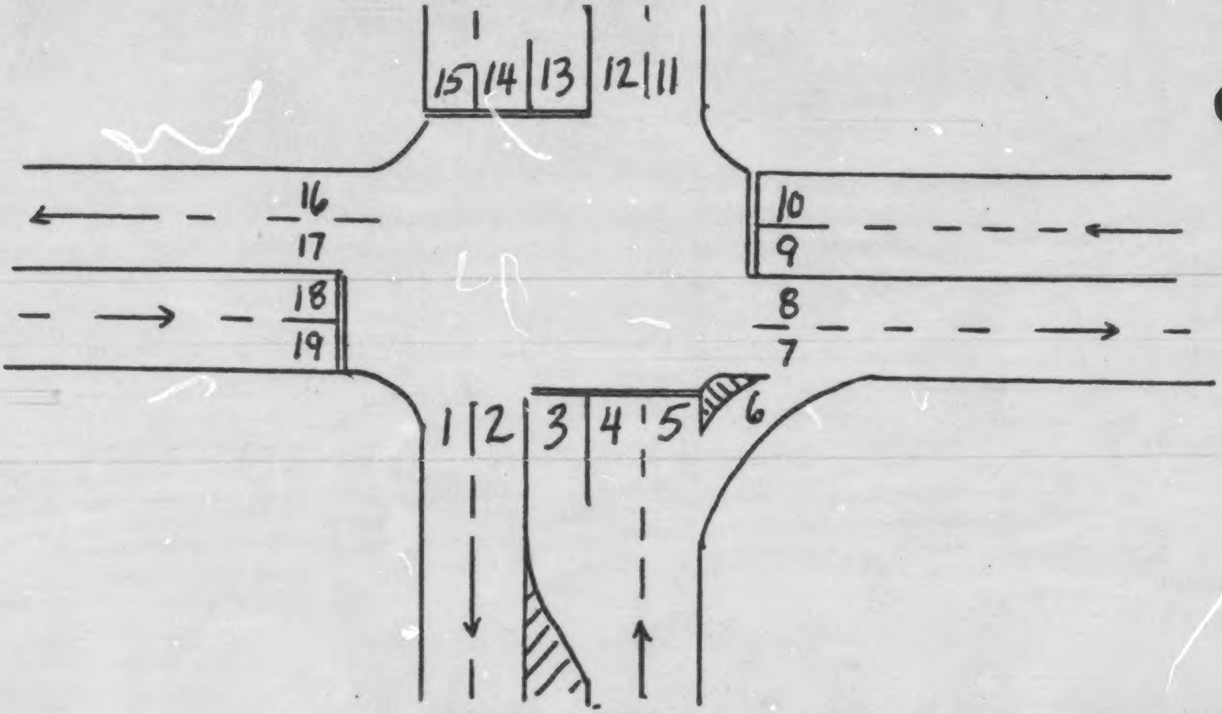
_____5. You are going North, and want to turn East. You should turn from which Lane? A. Lane 1 B. Lane 2 C. Lane 3

_____6. You are traveling North, and want to continue through the intersection to the North. The best lane would be: A. Lane 1 B. Lane 2 C. Lane 3

_____7. If a right turn is permitted from Lane 2, you should turn into which Lane? A. Lane 4 B. Lane 5 C. Lane 6 D. Lane 7

3/79

WORKSHEET W4b
(Page 4 of 4 pages)



TWO WAY - TWO WAY

You are approaching this intersection in Lane #5. You are going to turn left at the intersection, and travel West.

_____1. Your first maneuver should be into which Lane? A. Lane 6 C. Lane 4
B. Lane 3 D. Lane 2

_____2. From which lane should you turn left? A. Lane 3 C. Lane 6
B. Lane 4 D. Lane 5

_____3. In which lane should you have completed your turn? A. Lane 16 C. Lane 18
B. Lane 17 D. Lane 19

You are traveling North, approaching this intersection. You are driving in Lane #5. You are going to turn right, and travel East, at the intersection.

_____4. Your first maneuver should be into which Lane? A. Lane 4 C. Lane 6
B. Remain in Lane 5 D. Lane 7

_____5. By which lane should you turn right? A. Lane 5 C. Lane 7
B. Lane 6 D. Lane 8

_____6. In which lane should you complete your right turn? A. Lane 5 C. Lane 7
B. Lane 6 D. Lane 8

You are traveling West, approaching this intersection. You are driving in Lane #9. You are going to turn right, and drive North, at this intersection.

_____7. Your first maneuver should be into which Lane? A. Lane 7 C. Lane 9
B. Lane 8 D. Lane 10

_____8. You will start the turn from which Lane? A. Lane 8 C. Lane 10
B. Lane 9 D. Lane 11

_____9. You will complete your right turn in which Lane? A. Lane 9 C. Lane 11
B. Lane 10 D. Lane 12

You are traveling East, approaching this intersection. You are driving in Lane #19. You are going to turn left, and travel North, at this intersection.

_____10. Your first maneuver should be into which Lane? A. Lane 1 C. Lane 18
B. Lane 19 D. Lane 17

_____11. You will start the turn from which Lane? A. Lane 1 C. Lane 18
B. Lane 19 D. Lane 17

_____12. You will complete your left turn in which Lane A. Lane 14 C. Lane 12
B. Lane 13 D. Lane 11

_____13. If a right turn is permitted from Lane 9, you should turn into which Lane? A. Lane 11 C. Lane 13
B. Lane 12 D. Lane 14

March, 1979

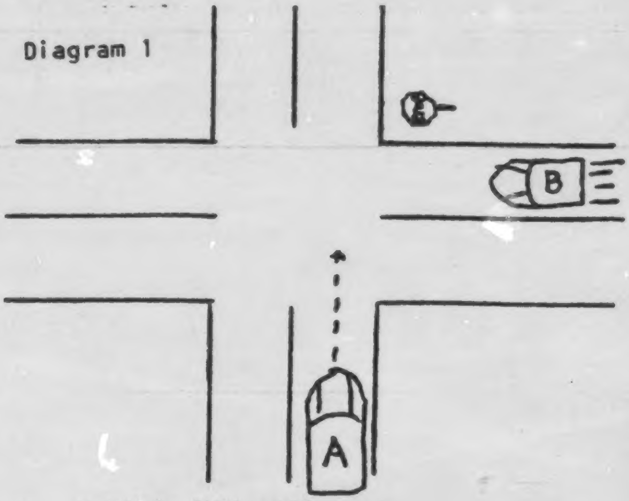
WORKSHEET W4c
(Page 1 of 2 pages)

ANTICIPATING ACTIONS OF OTHERS

Directions: In each of the following situations, you are the driver of Vehicle "A". Basically you have the legal right-of-way in each diagram except in #8 and are about to get legal right-of-way in #8.

Analyze each situation using the IPDE Formula to anticipate what might happen and decide what you would do.

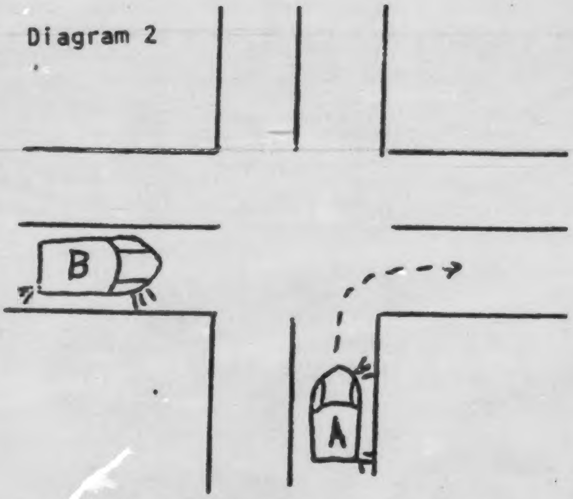
Diagram 1



a. Vehicle "B" will stop
b. Vehicle "B" will run the Stop Sign

What would you do?

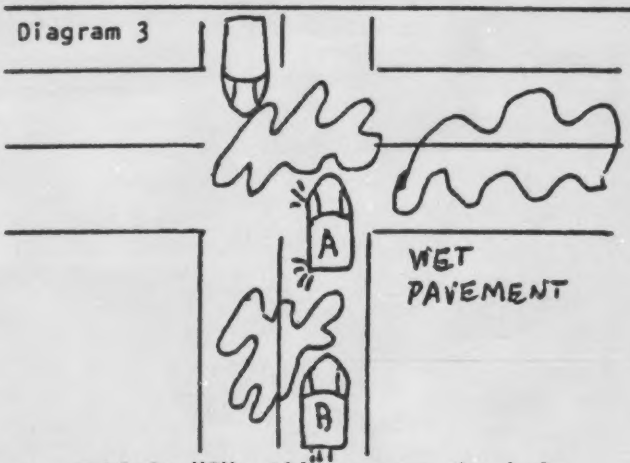
Diagram 2



a. Vehicle "B" will go straight
b. Vehicle "B" will turn right
c. Vehicle "B" may go straight, or turn right

What would you do?

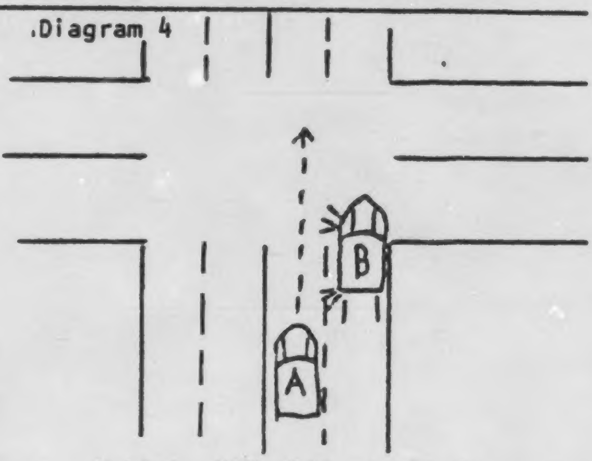
Diagram 3



a. Vehicle "B" will pass on the left
b. Vehicle "B" will pass on the right
c. Vehicle "B" will brake & skid into Vehicle "A"
d. Vehicle "B" will stop behind Vehicle "A"

What would you do?

Diagram 4



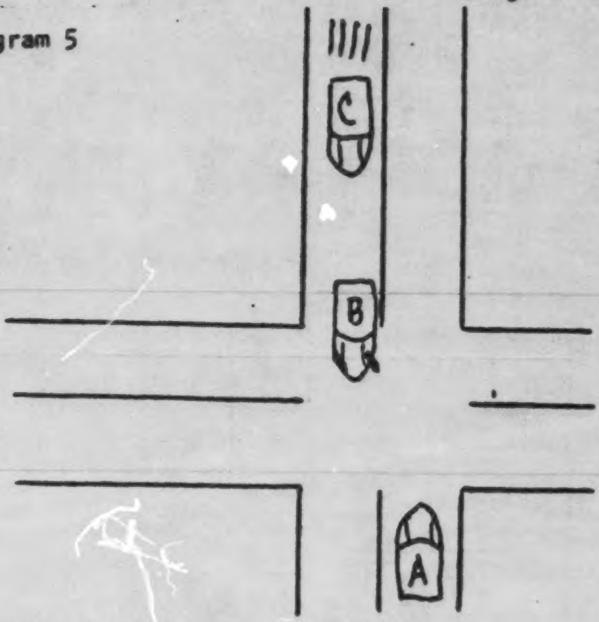
a. Vehicle "B" will turn left
b. Vehicle "B" will go straight
c. Vehicle "B" may turn right

What would you do?

WORKSHEET W4c
(Page 2 of 2 pages)

March, 1979

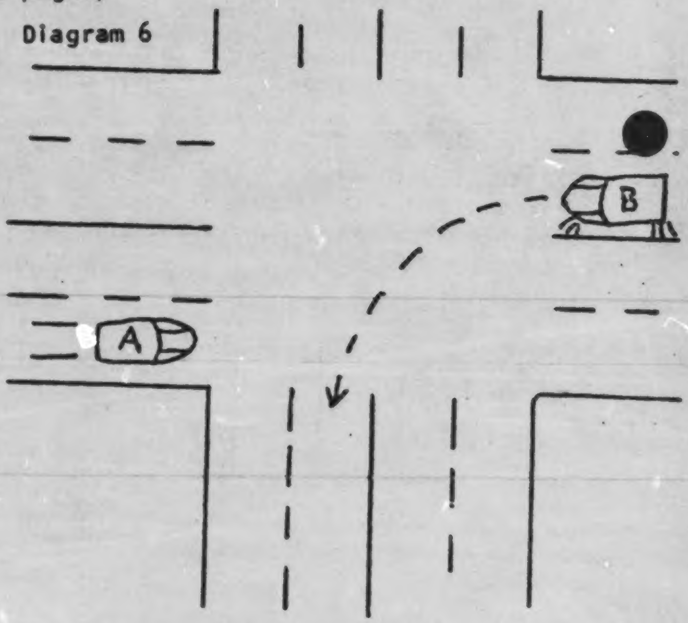
Diagram 5



a. Vehicle "B" may turn left in front of Vehicle "A"
b. Vehicle "C" may strike Vehicle "B", forcing him into "A"s path
c. Vehicle "C" may stop behind Vehicle

What would you do?

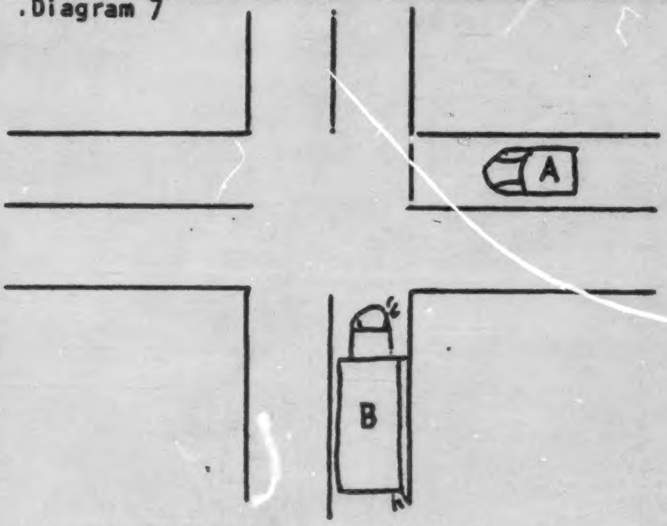
Diagram 6



a. Vehicle "B" will wait to turn left until "A" has passed
b. Vehicle "B" may turn left in front of "A"

What would you do?

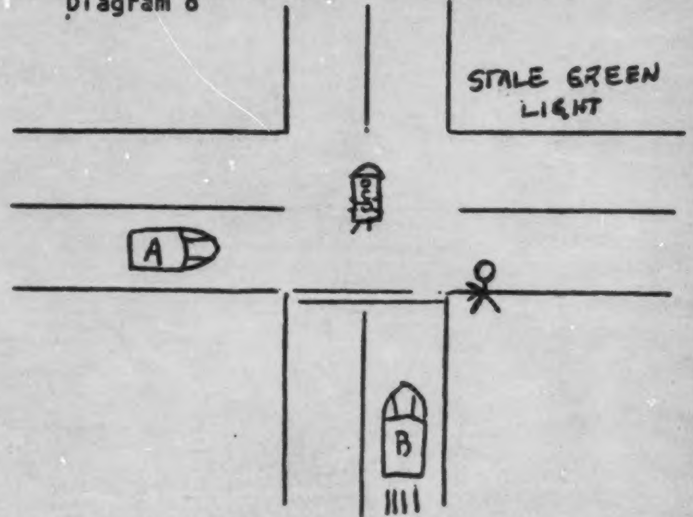
Diagram 7



a. There will be no problem when the truck turns
b. The truck will swing wide on the turn
c. The truck will wait for Vehicle A to clear the street before turning

What would you do?

Diagram 8



a. If the light changes, Vehicle "B" will have trouble stopping
b. Vehicle "B" will stop, blocking the crosswalk, forcing the Pedestrian into "A"s lane
c. Vehicle "B" will stop in time

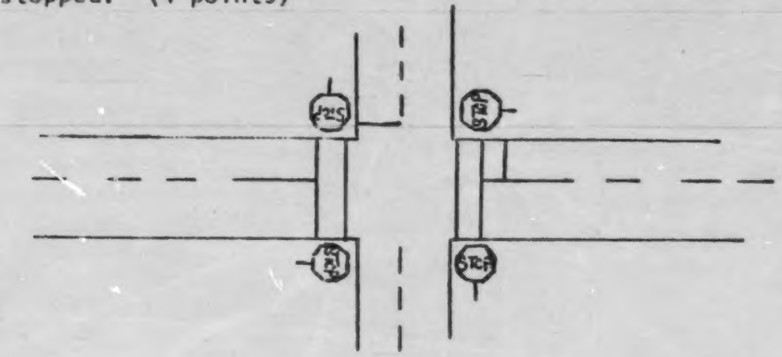
What would you do?

3/79

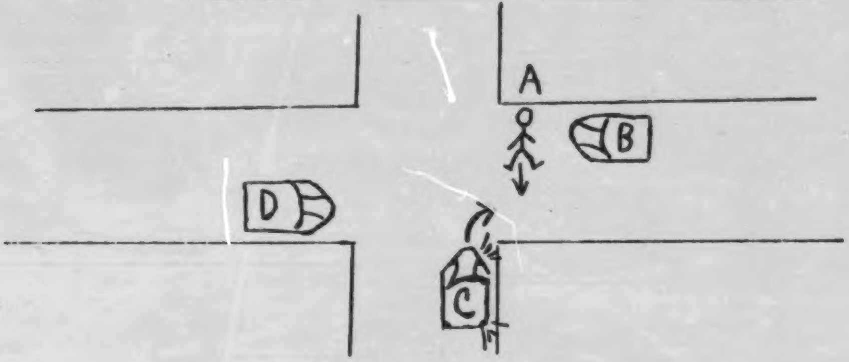
EVALUATION E4a
(Page 1 of 2 pages)

Follow the directions as provided in each question. A total of 15 points is needed to pass.

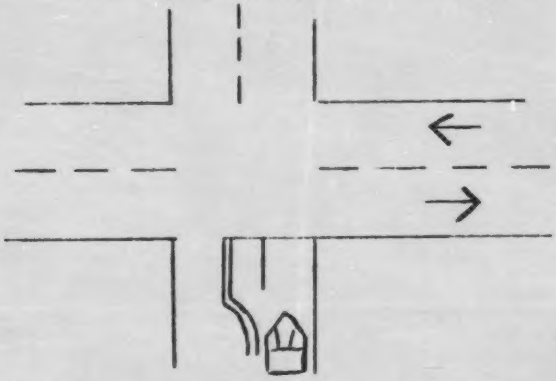
1. Show where you would stop the car at each corner of this intersection by drawing an arrow to the point where the front of the car should be when stopped. (4 points)

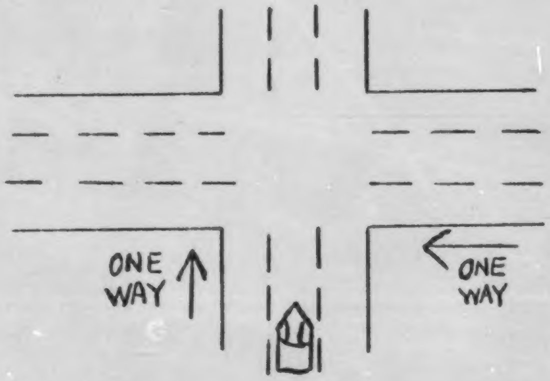


2. Who has the right-of-way to go first, second and third and fourth at this intersection? 1st______ 2nd______ 3rd______ 4th______. (4 points)



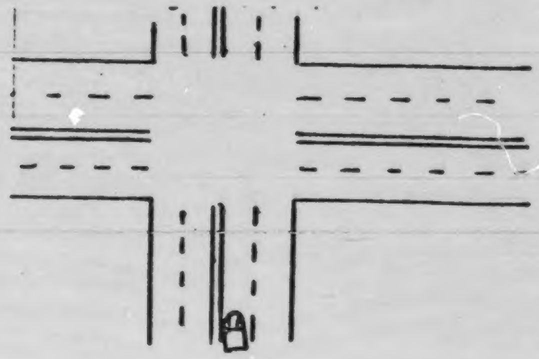
3. In the following diagrams, draw in the path the car should take to turn left. (4 points, 2 points each diagram)

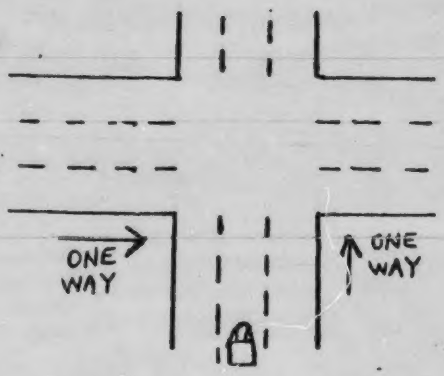




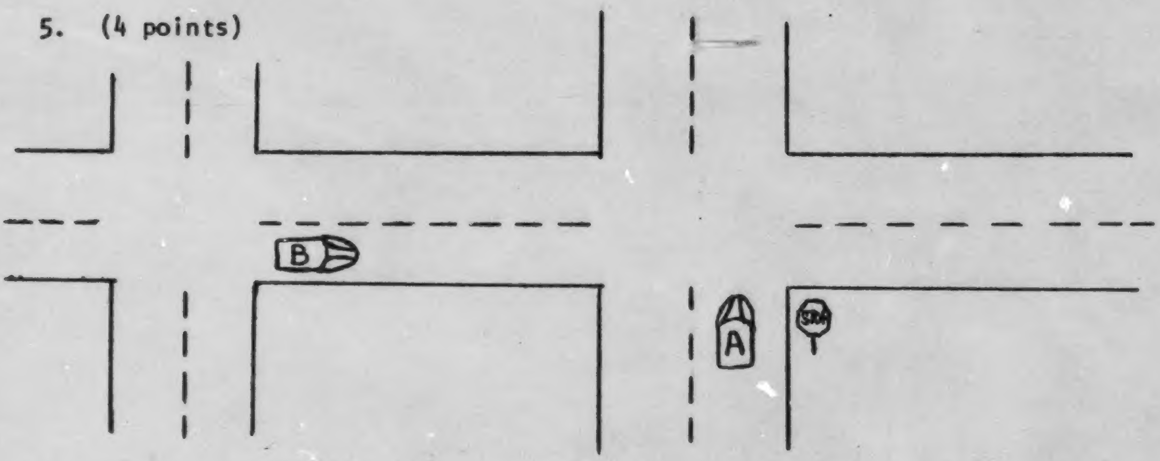
EVALUATION E4a
(Page 2 of 2 pages)

4. In the following diagrams draw in the path the car should take to turn right. (4 points, 2 points each diagram)





5. (4 points)



As the driver of car A, you estimate that car B is 5 seconds from the intersection (just slightly less than a block away in a 30 MPH zone).

a) Would you without waiting for B to pass the intersection:
   1) proceed straight through the intersection? _____Yes _____No
   2) turn left? _____Yes _____No
   3) turn right? _____Yes _____No

b) Would you turn right at this point in time if B's right turn signal was flashing? _____Yes _____No

May 1979

MODULE 5: TRAFFIC FLOW

OBJECTIVE

WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS RELATED TO KEEPING A SAFE SPACE CUSHION ALL AROUND THE VEHICLE AND TO AVOIDING CONFLICT WITH ON-COMING VEHICLES, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

IN THE DRIVER EDUCATION CAR, THE STUDENT WILL DEMONSTRATE HOW TO MAINTAIN AN ADEQUATE SEPARATION (SAFE SPACE CUSHION) WITH VEHICLES AHEAD, BEHIND AND TO THE SIDES, AND HOW TO AVOID CONFLICT WITH ON-COMING VEHICLES.

CONCEPTS

Following
Being followed
Traffic along side
On-coming traffic
Maintaining adequate separation:
  between the car and the vehicle ahead;
  between the car and a following vehicle;
  between the car and vehicles traveling along side.

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ____________________, pp. ________.
2. In a classroom or small group setting, view *Joining and Leaving Traffic Formations* (FS,C). While viewing, answer and briefly discuss as a group the questions posed on the filmstrip.
3. Independently read Informational Flyer IF5a and scan Informational Flyer IF5b.
4. In small groups of 3 or 4, recite and quiz each other on procedures and criteria for maintaining a space cushion as found in "________________________ School District Driving Task Procedures and Criteria."
5. In small groups of 2 to 4, complete Worksheet W5a.
6. In the driver education car, practice maintaining a safe space cushion around the car, concentrating first on procedures, and then progressing to application of the Human Functions.

EVALUATION

1. Complete Evaluation E5.
2. In moderate-to-heavy traffic, demonstrate maintaining an adequate separation (safe space cushion) for a specified time of 5 minutes without error according to the procedures and criteria as outlined in "________________________ School District Driving Task Procedures and Criteria."

May, 1979

INFORMATIONAL FLYER IF5a

(Page 1 of 2 pages)

Leaving too little room between cars sets the stage for a great number of accidents, namely the rear end collision. About 30% of city accidents are rear-end collisions. In one year nearly 2,400 involved fatalities. Rear-end accidents account for about 70% of all accidents that occurred on freeway crests and dips. Following too closely was cited as the cause of 44% of the rear-end accidents. Though not the greatest contributor in all settings to deaths and injuries, the rear end collision does contribute substantially to the statistics of deaths and injuries, and also puts a big dent in the pocketbook of the hitter and the hit.

Oddly, rear end smashups are the easiest accidents to prevent. But there's a basic misunderstanding about how and why they happen. Rear ending is the direct result of drivers following so closely they can't stop or dodge in time--even if they pay the closest attention and have the fastest reflexes. The following are some measures you can take to prevent rear end collisions:

STOP SUDDEN STOPS-Stopping is never as easy as it seems. It involves a lot of good judgment and the unbreakable laws of nature. It depends on many factors: car speed, driver alertness and reaction time, road surface and slope, weather, tires, brakes, and even car weight. It requires fast, accurate decisions and different ones for constantly different situations.

Yet, too many drivers take stopping for granted. They fail to realize there's always a time lapse between the moment they see danger and the time they react to it. Not only that, it takes another split second to apply the brakes and more time for the brakes to do their job, which varies according to car load, tires and the road. Also often overlooked is the fact that as speed increases, brakes take longer to operate. When speed is doubled, four times as much braking distance is needed normally; if tripled, nine times as much braking distance is needed.

ADJUST YOUR SPEED-Traveling too fast for conditions and rear end collisions are bumper-kissing cousins. The faster your speed the less you see and the less time you have to react.

At 55 MPH, you can effectively see little more than the width of the road, yet when a hazard suddenly looms up you'll clip off 60 feet before you even touch the brake pedal. And if you are following too closely, it is almost impossible to react soon enough when the car ahead has to react in an emergency.

AVOID GETTING TRAPPED- Try to stay several car lengths behind, more the faster you go or whenever visibility and traction are reduced. If you are closer than 5½ car lengths at 55 MPH, you're taking a senseless risk.

Drop back when following trucks and other vehicles which obstruct your vision. If the vehicle ahead prevents you from clearly seeing oncoming traffic, approaching intersections, or traffic signs--you're following too closely.

Keep checking to see if someone is following YOU too closely. If so, slow down gradually, pull over to the right if you can and allow him to pass. Never let him force you into tailgating the car ahead.

Avoid sudden moves yourself. Unexpected and unsignaled turning or stopping maneuvers by you as well as the other driver can cause a smashup.

Keep pace with traffic. The too-fast driver is constantly overtaking and "hugging" other cars, while the too-slow driver forces impatient drivers to shorten following distance and pass at dangerous times.

If challenged, yield the right-of-way and drop back if someone cuts in front of you.

May, 1979

INFORMATIONAL FLYER IF5a
(Page 2 of 2 pages)

Study the road ahead for potential hazards and plan emergency measures. The faster your speed-the further ahead your attention should reach.

Steer clear of "packs" or clusters of cars. They'll hem you in and eliminate any possible escape route.

Slow down for vehicles ahead which give the slightest hint of turning, so you can keep your distance more easily and adjust to what's coming from behind. That way you reduce the risk of a panic stop or swerve into faster moving traffic in case the turning driver makes his move impulsively or other drivers in front of you fail to react properly.

Stopping takes longer when things are not normal. Therefore, you should increase your following distance:

WHEN your view is limited. You have to see danger to react to it and reduced visibility from darkness, weather, traffic, road or even a dirty windshield can cut your perception time drastically.

WHEN you go over the crest of a hill. The pull of gravity increases on the downgrade, which adds to your momentum.

WHEN roads are rough or bumpy. Bouncing car wheels give unequal friction and braking.

WHEN you drive over deposits of loose gravel on a hard, dry road surface. Once on the roll, gravel can cut tire gripability in half.

WHEN on icy pavement. At 32 degrees, when ice is wettest, it takes twice as long to stop as at zero.

WHEN road dirt becomes an oily film in rain. It's worse after a light shower or at the onset of a heavy downpour--before the dirt can be washed away.

WHEN asphalt roads "bleed" in hot weather. The oil rises to the surface and can create a slippery condition.

WHEN riding across raised pavement markings that adhere to the road surface. The smooth top of the markings reduces friction, especially when wet and when you may least expect it.

WHEN driving on seemingly clear roads in winter. Frost or patches of ice tend to settle in shady spots, at intersections surrounded by tall buildings or trees, on the north and west sides of hills, on bridge floors, around underpasses, and at the bottom of banked curves and crowned roads.

WHEN the road is wet, regardless of whether it's raining or snowing at the time. Temporary conditions such as standing pools of water and batches of wet leaves also make the road slippery.

WHEN driving at night or during weather conditions that adversely affect the driver's ability to see roadway and traffic conditions ahead. Vehicles may decelerate sharply during poor visibility. A greater following distance is required to allow a safety cushion for responding to sudden actions by the vehicle(s) ahead.

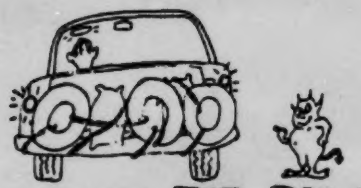
WHEN fatigued. This causes a person to respond to situations more slowly than when he is fresh. The longer the driver takes to react, the more distance is required to stop the car. To accommodate this poorer performance, the driver allows a greater headway from the vehicle in front. (Note: Drivers should generally not be operating a vehicle when fatigued; but recognizes that a driver is more fatigued when driving home after work than when driving to work before a shift or more fatigued near the end of a trip than at the start.)

(Credit is given to Allstate Insurance Co. for its pamphlet "Avoid Rear End Collisions," from which a majority of this material was taken.)

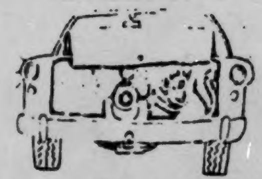
May, 1979

INFORMATIONAL FLYER IF5b
(Page 1 of 2 pages)

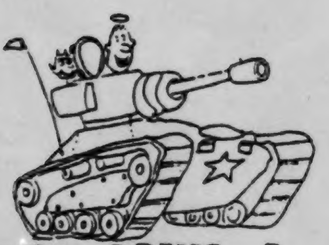
HOW TO HANDLE TAILGATERS



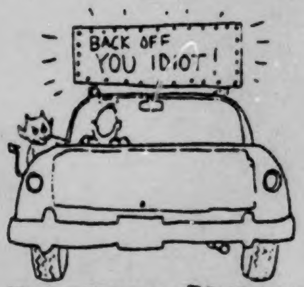
WOULD YOU TIE PILLOWS OR INNER TUBES TO YOUR REAR BUMPER?



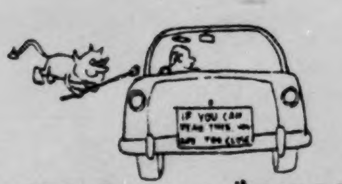
WOULD YOU INSTALL A CANNON IN YOUR TRUNK?



WOULD YOU DRIVE A WAR SURPLUS TANK?

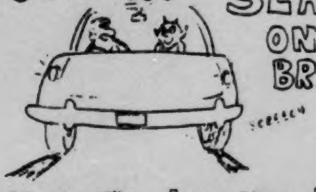

BACK OFF YOU IDIOT!

WOULD YOU INSTALL ELECTRICAL SIGNS ON TOP OF YOUR CAR?


IF YOU CAN READ THIS YOU ARE TOO CLOSE

WOULD YOU PUT A "SMART" BUMPER STICKER ON YOUR REAR BUMPER?

WOULD YOU SLAM ON YOUR BRAKES?

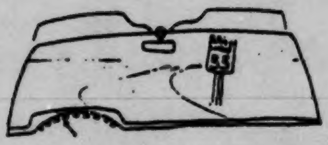


IF HE HITS YOU IT'S HIS FAULT! WHAT IF YOU END UP IN THE HOSPITAL OR THE MORGUE?

May, 1979

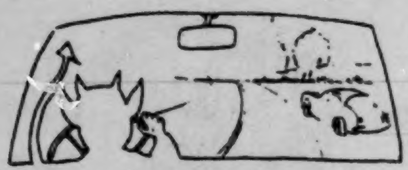
INFORMATIONAL FLYER IF5b
(Page 2 of 2 pages)

WE HOPE NOT!
YOU SHOULD...



CHECK YOUR SPEED...

INCREASE SPEED –
AT LEAST TO THE SPEED LIMIT!



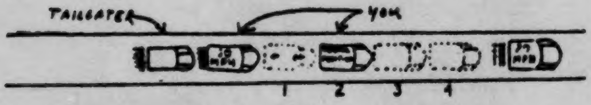
LANE CHANGE, IF YOU CAN.

PULL OFF THE ROAD, IF NECESSARY.

FORCE HIM TO PASS

DOUBLE THE SPACE CUSHION IN FRONT OF YOUR VEHICLE

WHY?



BY MOVING BACK & DOUBLING YOUR SPACE CUSHION. IT ALLOWS YOU TO COME TO A SLOW GRADUAL STOP IF NECESSARY & FORCES THE TAILGATER TO DO LIKEWISE. YOU HAVE COMPENSATED FOR HIS LACK OF SPACE CUSHION TO YOUR REAR.

"KEEP YOUR COOL"

THE LIFE AND VEHICLE YOU SAVE WILL BE YOUR OWN!

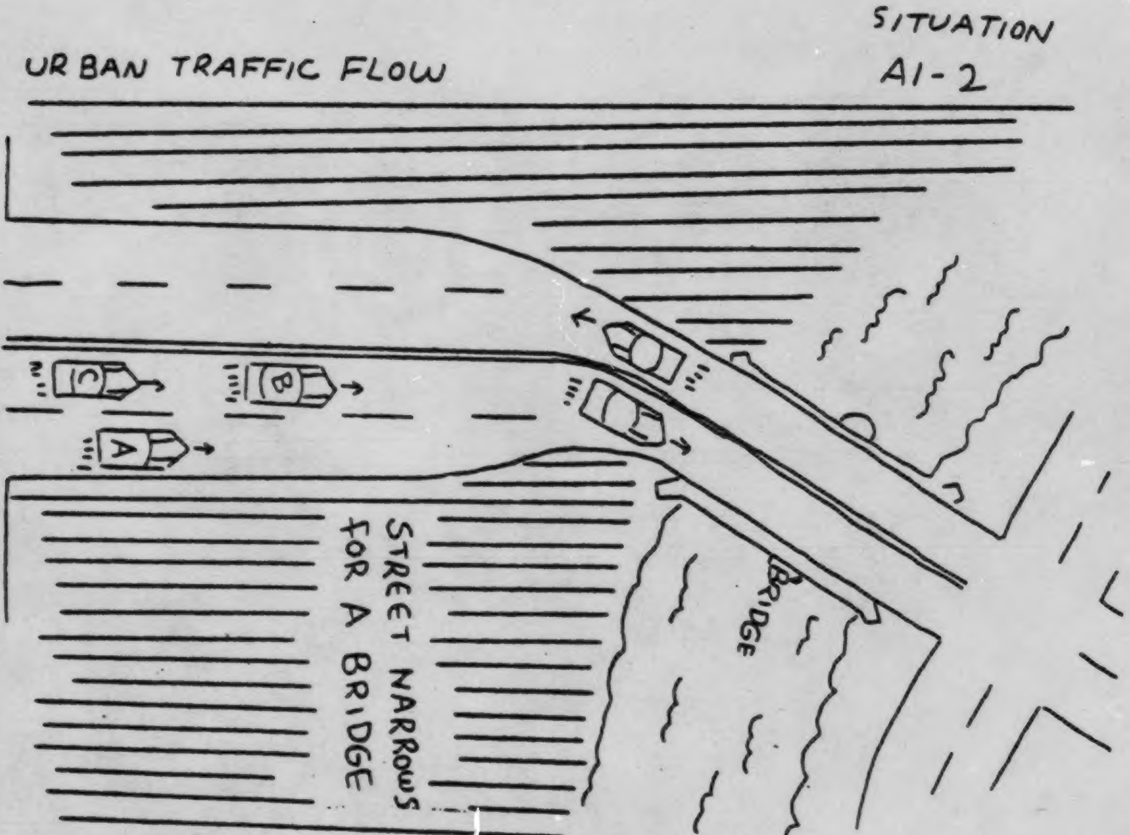
May 1979

WORKSHEET W5a
(Page 1 of 5 pages)

Directions: After discussion in your small group of 2 to 4, write your answers on a separate sheet to the following questions for each situation:

1. What could you do? (Point out at least 2 alternatives for each situation.)
2. What should you do (and we hope, would you do)?
3. What could you or should you have done that would have kept you out of the situation, if it would be more desirable not to be in the situation?

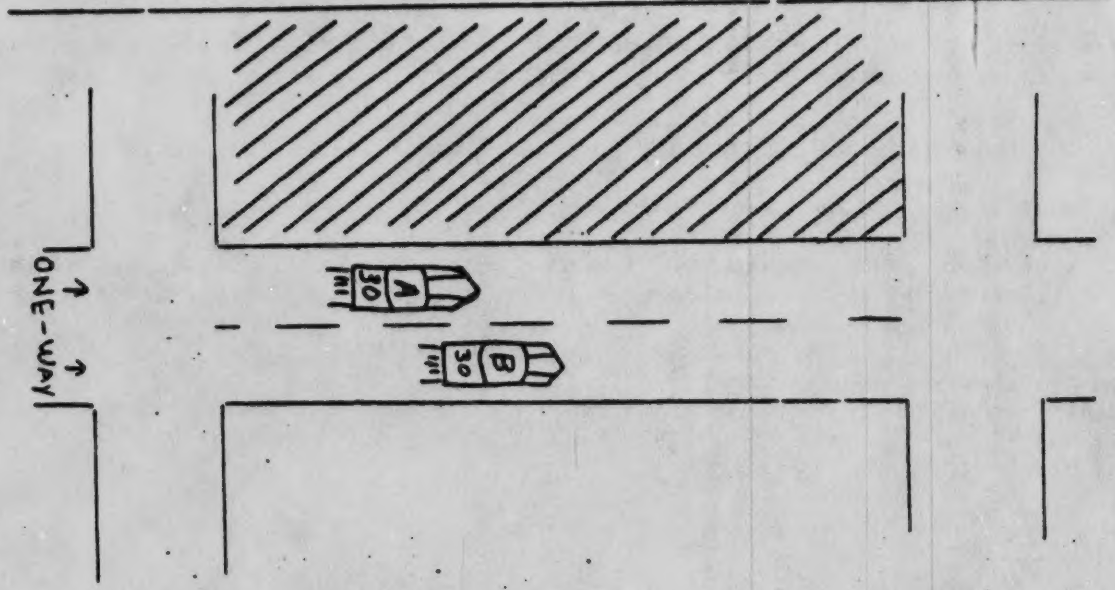
You are always the driver of Car A.
Identify the situations on your own paper by the number of the situation, i.e., A1-2, A1-3, A1-6, B3-1, B3-2, B3-3, C5-1, C5-3, C5-4.


URBAN TRAFFIC FLOW
SITUATION
A1-2
C
B
A
BRIDGE
STREET NARROWS FOR A BRIDGE

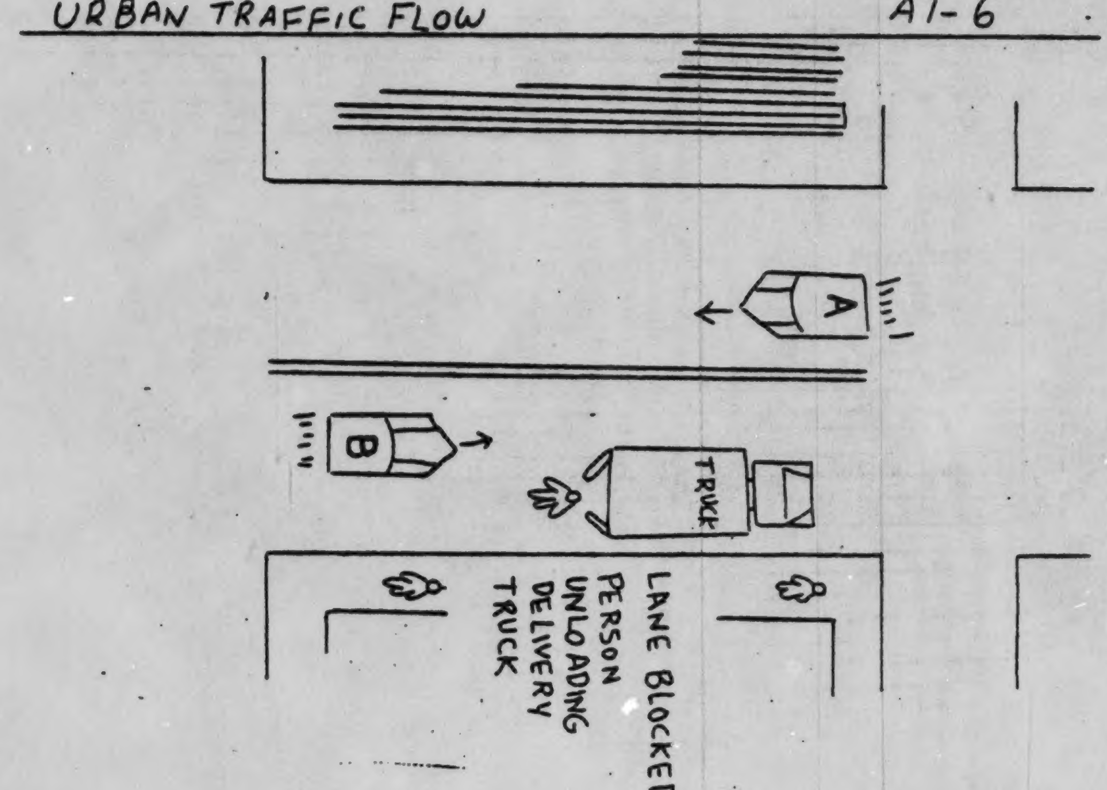
May, 1979

WORKSHEET W5a
(Page 2 of 5 pages)

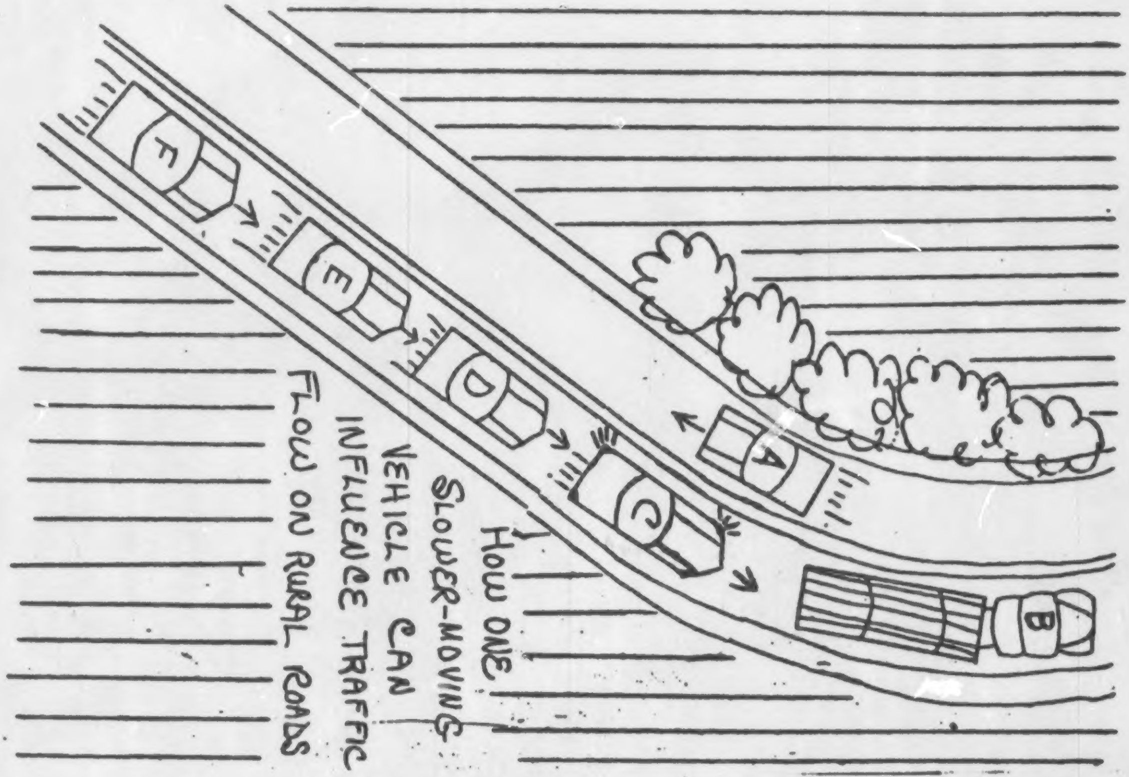
SITUATION A1-3


URBAN TRAFFIC FLOW
A
30
B
30
ONE-WAY

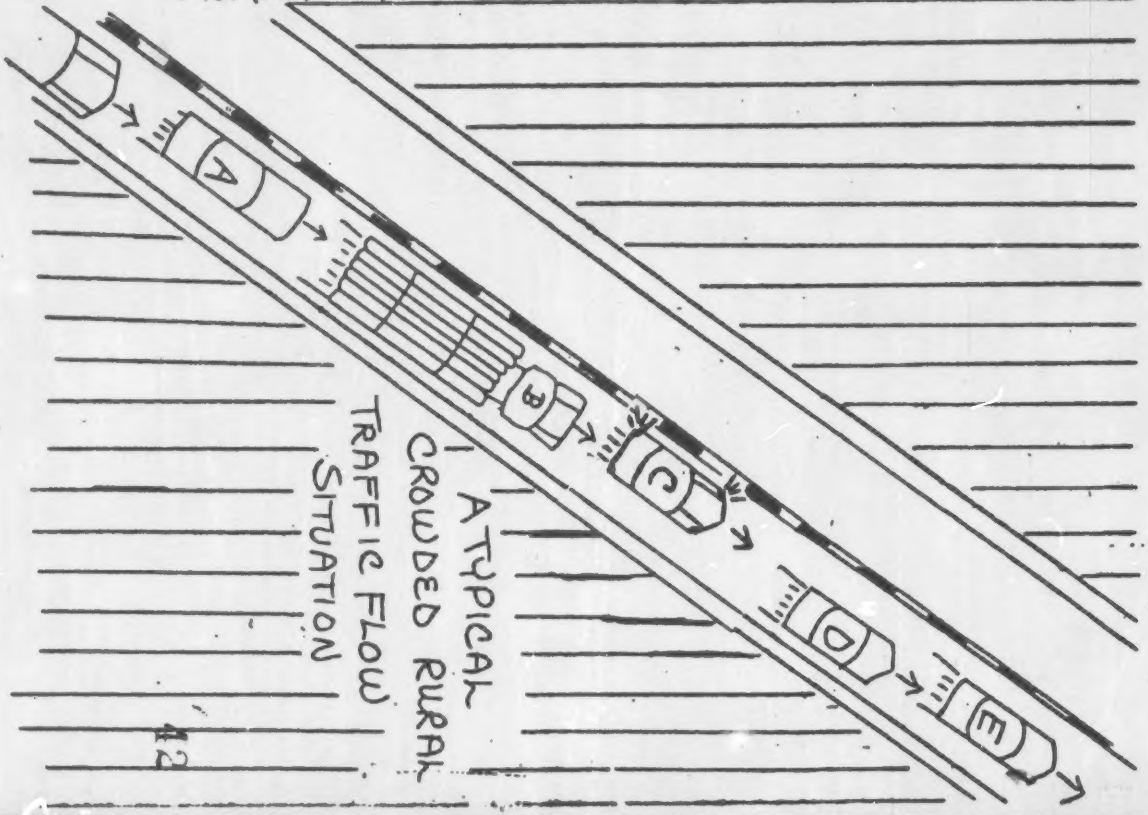
SITUATION A1-6


URBAN TRAFFIC FLOW
A
B
TRUCK
LANE BLOCKED-
PERSON
UNLOADING
DELIVERY
TRUCK

RURAL TRAFFIC FLOW SITUATION B3-1


F
E
D
C
A
B
HOW ONE SLOWER-MOVING VEHICLE CAN INFLUENCE TRAFFIC FLOW ON RURAL ROADS

RURAL TRAFFIC FLOW SITUATION B3-2

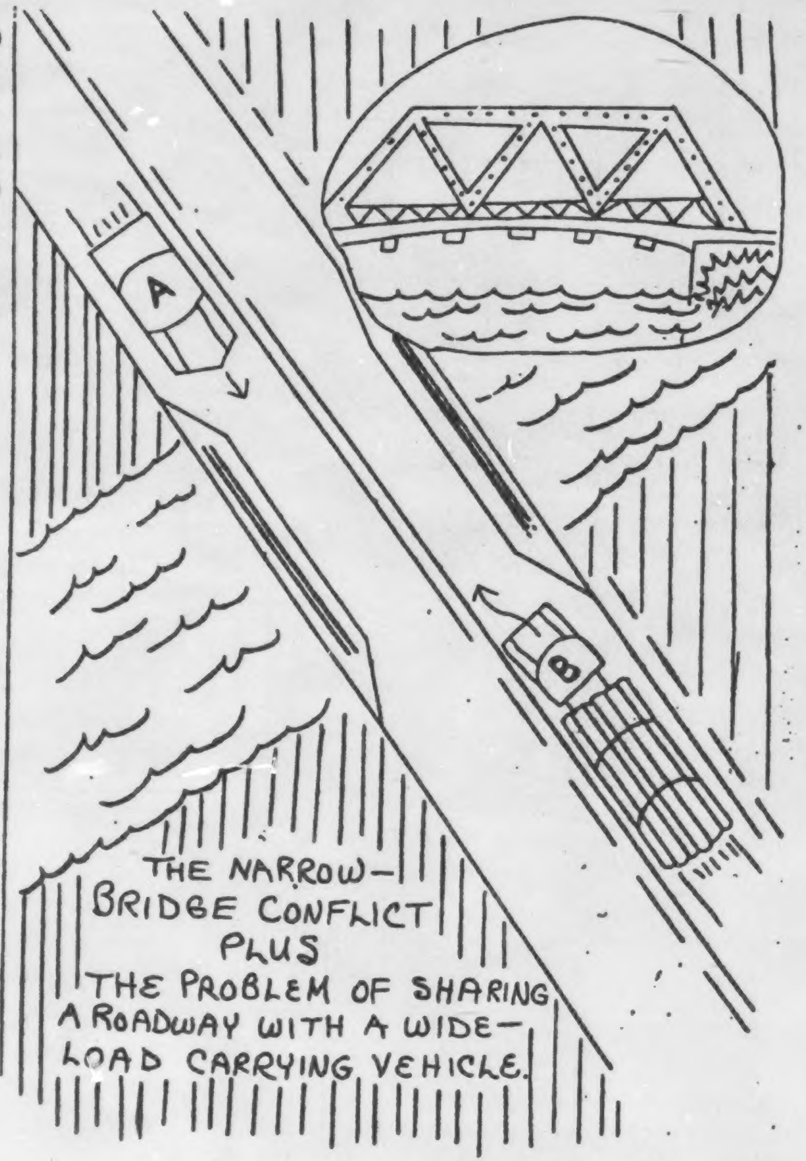

A
B
C
D
E
A TYPICAL CROWDED RURAL TRAFFIC FLOW SITUATION

WORKSHEET W5a
(Page 4 of 5 pages)

May, 1979

SITUATION B 3-3

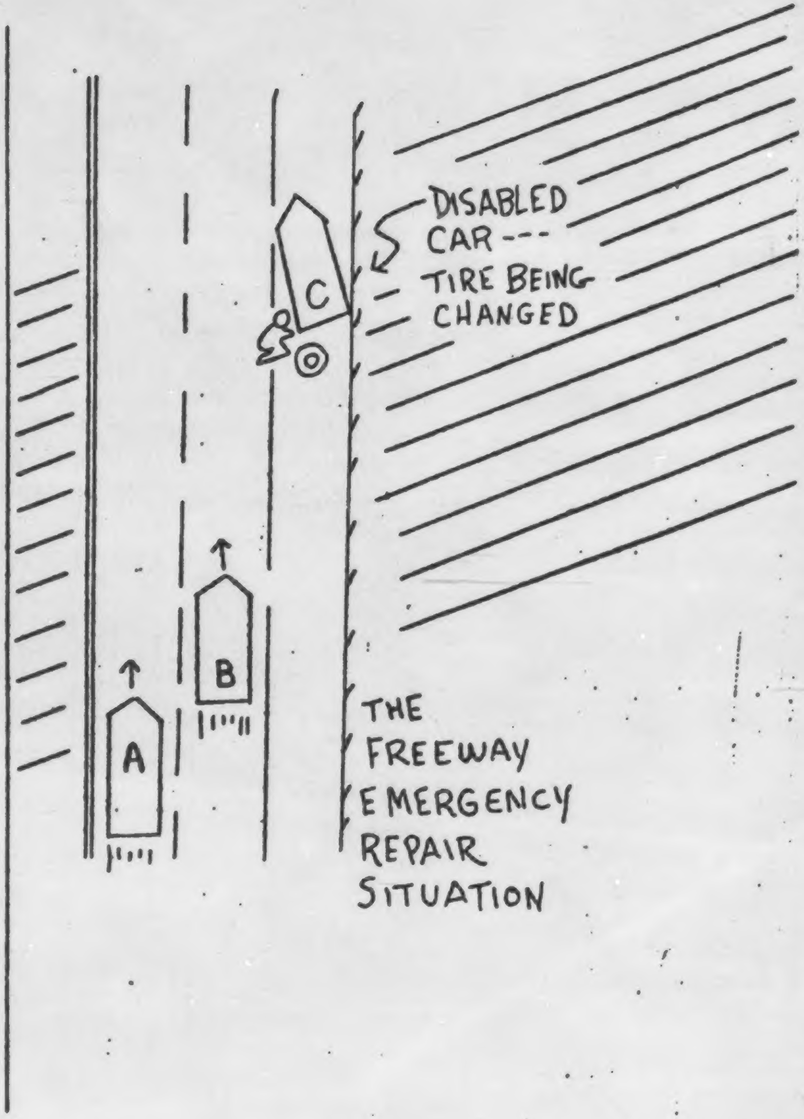
RURAL TRAFFIC FLOW



THE NARROW-BRIDGE CONFLICT
PLUS
THE PROBLEM OF SHARING A ROADWAY WITH A WIDE-LOAD CARRYING VEHICLE.

SITUATION C5-1

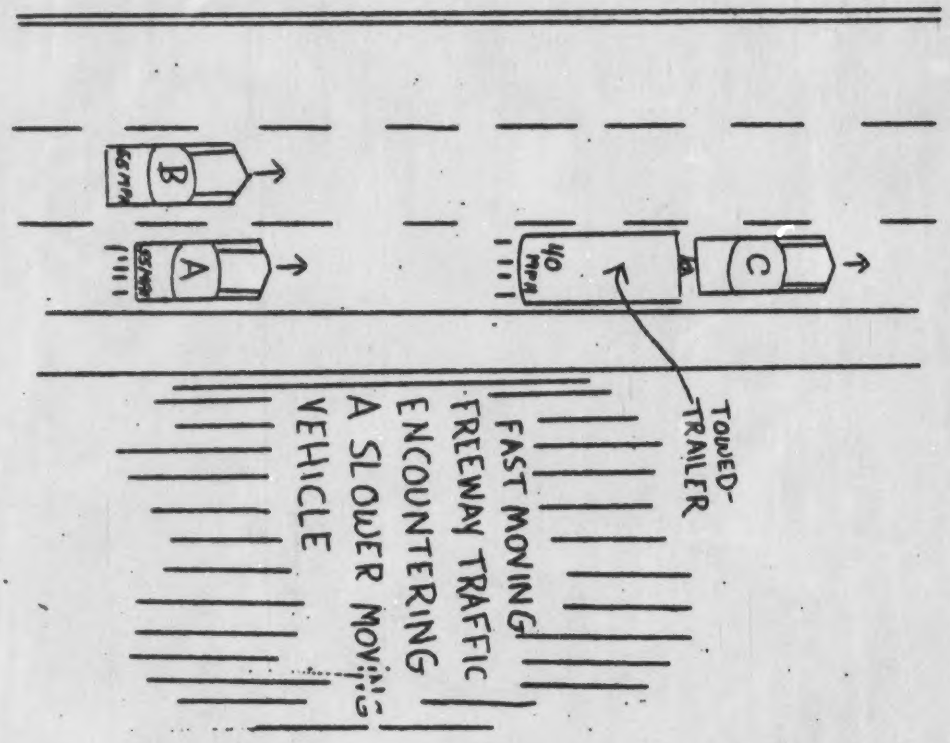
FREEWAY TRAFFIC FLOW


DISABLED CAR---
TIRE BEING CHANGED
C
A
B

THE FREEWAY EMERGENCY REPAIR SITUATION

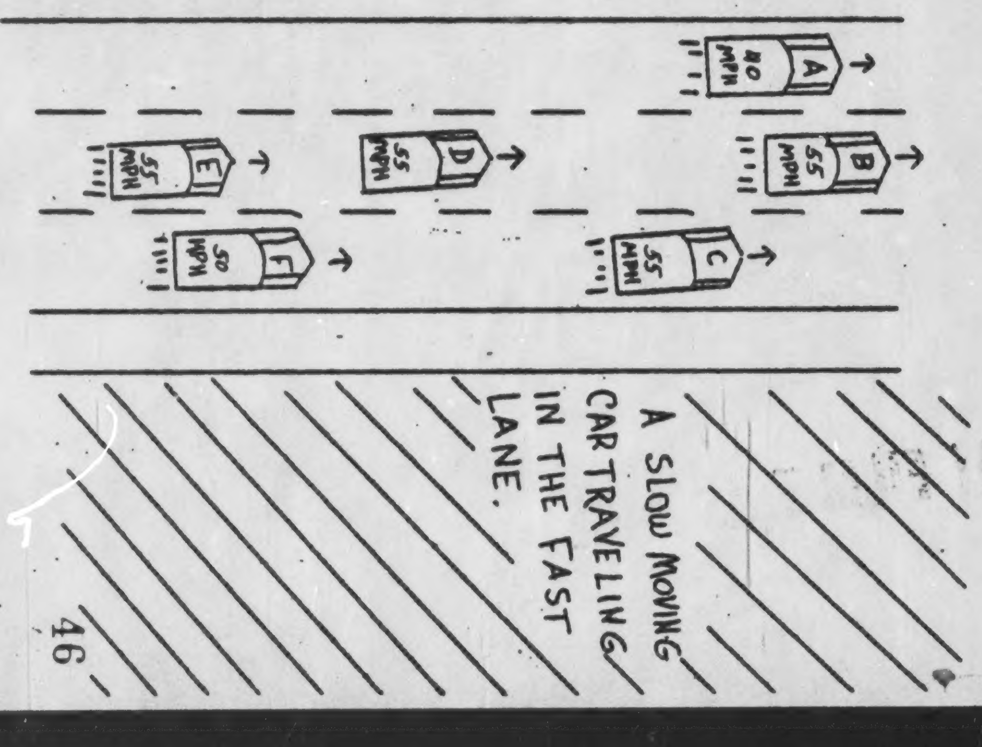
FREEWAY TRAFFIC FLOW

SITUATION
C5-3


B
55 MPH
A
55 MPH
40 MPH
C
TOWED-
TRAILER
FAST MOVING
FREEWAY TRAFFIC
ENCOUNTERING
A SLOWER MOVING
VEHICLE

FREEWAY TRAFFIC FLOW

SITUATION
C5-4


A
40 MPH
B
55 MPH
C
55 MPH
D
55 MPH
E
55 MPH
F
50 MPH
A SLOW MOVING
CAR TRAVELING
IN THE FAST
LANE.

5/79

EVALUATION E5a
(Page 1 of 2 pages)

Directions: Write the letters of the correct answers on the separate answer sheet. A total of 8 points is needed to pass.

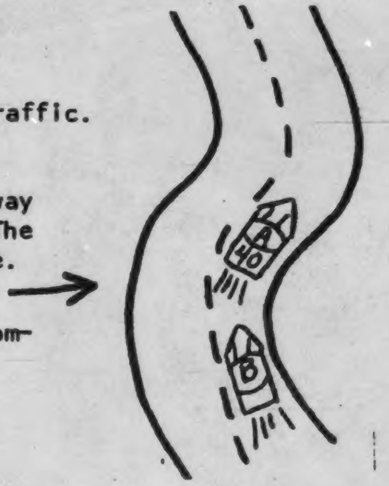
(All questions 1 point each)

1. Traveling at about the same speed as other vehicles may:
   a). Help a driver avoid crowding the traffic ahead.
   b). Make passing necessary.
   c). Cause one to approach traffic too quickly.
   d). Cause traffic to slow down.

2. When driving on a multiple-lane roadway in moderate traffic, a driver should avoid:
   a). Driving in the outside lane.
   b). Driving in the inside lane.
   c). Driving in the blind spot of another vehicle going the same direction.
   d). Following other vehicles in the same lane if another lane is empty.

3. Under normal circumstances, the interval a driver should leave between his/her vehicle and the vehicle to the front is:
   a). 3 seconds.
   b). 2 seconds up to 35 MPH and 3 seconds above 35 MPH.
   c). 1 second in light traffic and 2 seconds in heavy traffic.
   d). 2 seconds.

4. In the diagram to the right, the drivers are on a highway where the speed limit is 50MPH and traffic is light. The driver of Car B has been tailgating Car A for some time. The driver of Car A should:
   a). Maintain present speed and position if he/she is comfortable with that.
   b). Increase speed to 50 MPH.
   c). Slow down to 30 MPH.
   d). Flash the brake lights.



5. If a driver is in a line of traffic, and someone is tailgating him/her, he/she should:
   a). Increase the following distance between him/her and the car ahead.
   b). Sound the horn and look back sharply.
   c). Put the brakes on quickly to make the "tailgater" realize he/she couldn't stop in an emergency.
   d). Decrease the following distance between him/her and the car ahead.

6. You are driving at the speed limit on a two-lane road and another driver wants to pass you. You should.
   a). Maintain speed and keep him/her from passing.
   b). Speed up in order to keep him/her from tailgating.
   c). Decrease speed.
   d). Help him/her pass safely.

May, 1979

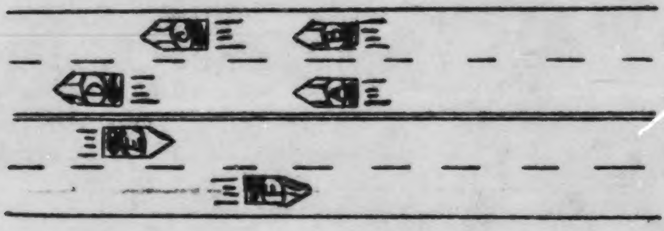
EVALUATION E5a
(Page 2 of 2 pages)

7. In regard to oncoming traffic, drivers can:

   a). Estimate distance better than speed.
   b). Estimate speed better than distance.
   c). Estimate distance and/or speed about equally.
   d). Assume the oncoming car is within the speed limit.

8. To minimize the chances of conflict with oncoming traffic, you should:

   a). Drive as far right as the pavement or road surface allows.
   b). Slow down slightly as each vehicle approaches.
   c). Search for clues to circumstances that could cause the oncoming vehicle to move into your lane.
   d). All of the above.



9. If you are the driver of Car A. in the above, you probably should:

   a). Maintain your speed and position.
   b). Speed up enough to assume a position between C & B in the inside lane.
   c). Slow down enough to assume a position behind B in the inside lane.
   d). Any one of a), b), or c).

10. When the car ahead of you is tailgating, the best action for you to take is:

   a). Increase your following distance to a 3-second interval.
   b). Maintain your 2-second interval but be more alert to hazards beyond the car ahead.
   c). Pass both cars as soon as a safe zone is available.
   d). Drop back and let others pass you.

March, 1979

MODULE 6: LANE CHANGES

OBJECTIVE WHEN PRESENTED WITH A SERIES OF OBJECTIVE QUESTIONS RELATING TO LANE CHANGING, THE STUDENT WILL RESPOND WITH 70% ACCURACY.

IN THE DRIVER EDUCATION CAR, THE STUDENT WILL DEMONSTRATE CORRECT LANE CHANGES BOTH TO THE RIGHT AND LEFT WHILE APPROPRIATELY APPLYING HUMAN FUNCTIONS, USING THE PROCEDURES AND CRITERIA AS OUTLINED IN "__________ SCHOOL DISTRICT DRIVING TASK PROCEDURES AND CRITERIA."

CONCEPTS

Lane change procedures
Blind spots
Gap selection while changing lanes
Reasons for changing lanes
Related traffic laws
Entering traffic from a parking space
Anticipating and aiding lane changes of others

STUDENT LEARNING ACTIVITIES

1. Independently read textbook __________________________, pp.__________.
2. In groups of 3 or 4, recite and quiz each other on procedures and criteria for lane changing as found in "____________________ School District Driving Task Procedures and Criteria."
3. Independently read Informational Flyer IF6a.
4. Independently complete Worksheets W6a and b.
5. In a classroom or small group setting, participate in a teacher-led discussion on lane changing.
6. In the Driver Education car, practice lane changes on four-lane streets, one-way streets, and expressways, concentrating first on procedures, and then progressing to application of the Human Functions.

EVALUATION

1. Complete Evaluation E6.
2. Demonstrate correct lane changes in moderate-to-heavy traffic using Human Functions in at least 2 out of 3 times each to the left and to the right without cues from the instructor.

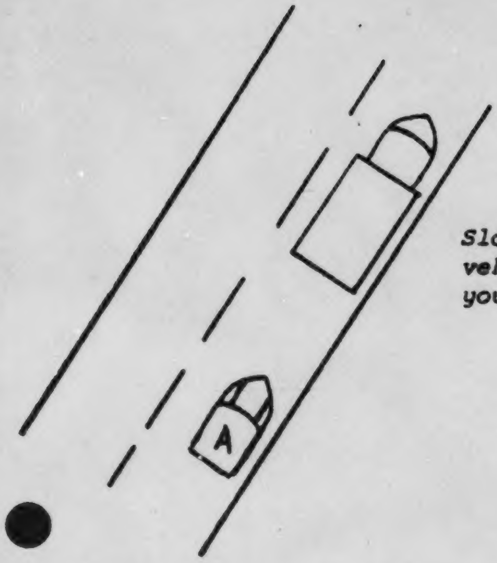
INFORMATIONAL FLYER IF6a

March, 1979

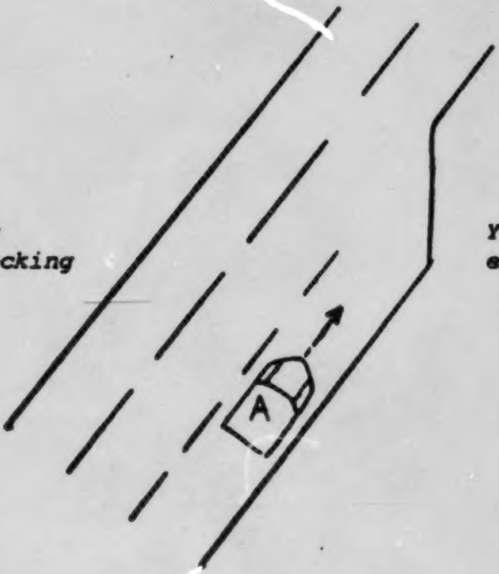
(Page 1 of 4 pages)

When preparing to lane change, the first question that should be asked is, "Do I need to change?", or "Is there a reason for this lane change?"

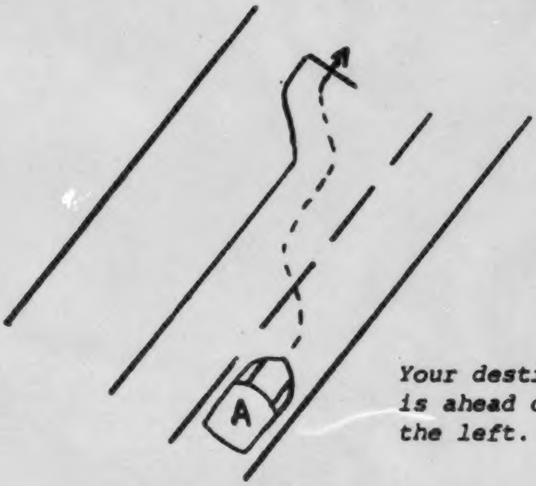
The following illustrations offer some good reasons for lane changing:



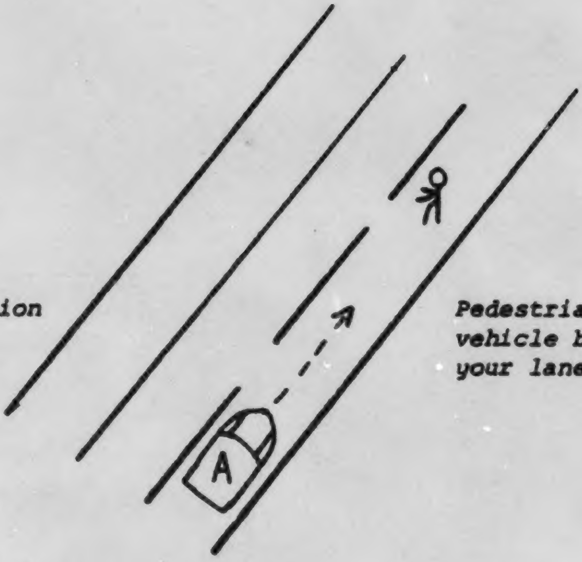
Slow-moving vehicle blocking your path.



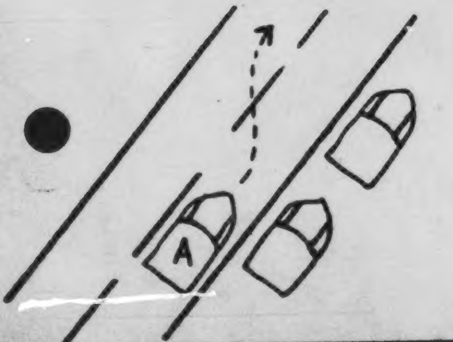
Your lane ends.



Your destination is ahead on the left.



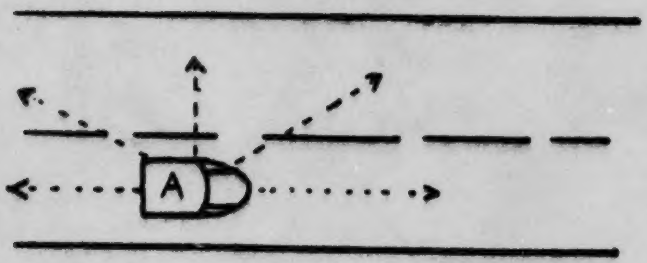
Pedestrian, animal, vehicle blocking your lane.



To minimize hazards.

The next step is to prepare to change lanes.

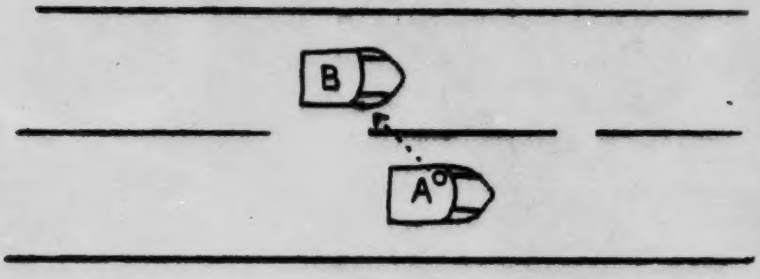
Check the critical areas:



1. Check ahead
2. Check side mirror
3. Check rear view mirror
4. Check the sides of the car

Be sure no one is entering the space cushion around your vehicle.

Check your blind spot:



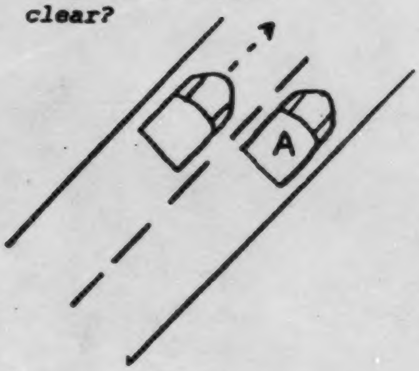
1. Take a quick glance over your shoulder in the direction where you plan to move your vehicle.

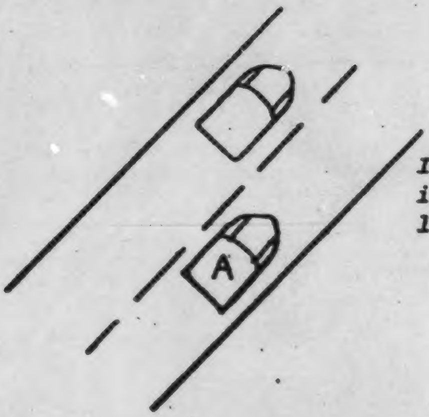
After checking your blind spot, ask yourself, "Can I safely lane change?"

INFORMATIONAL FLYER IF6a
(Page 3 of 4 pages)

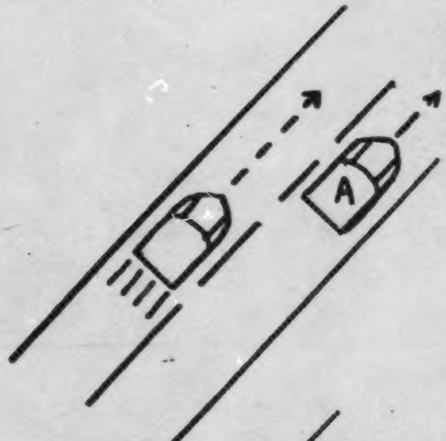
Is it safe? Following are some illustrated conditions which might make lane changing an unsafe maneuver:

Is your blindspot clear?

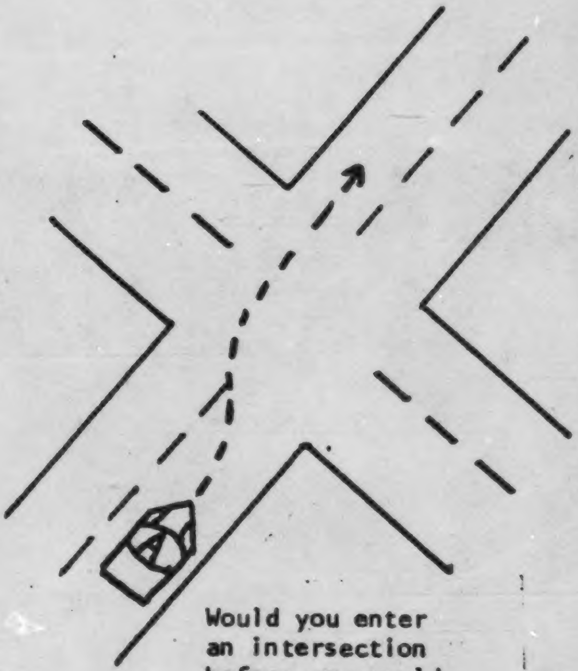




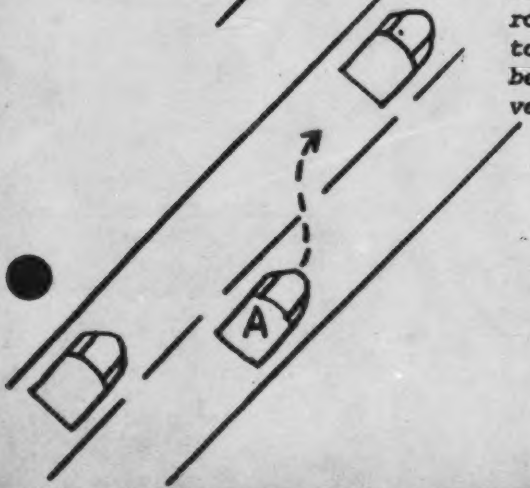
Is there room in the next lane?



Is the vehicle in the next lane approaching at too high a rate of speed?



Would you enter an intersection before you could complete your lane change?



Do you have room enough to change between vehicles?

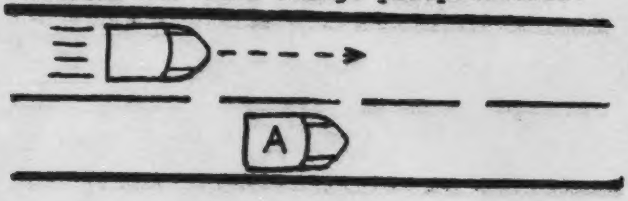
March, 1979

INFORMATIONAL FLYER IF6a
(Page 4 of 4 pages)

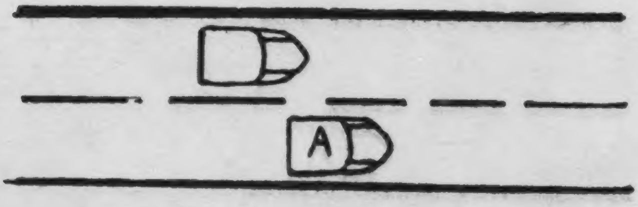
Now that you have checked traffic in all directions and have determined that it is safe to lane change, you are ready to lane change.

Like all other maneuvers, lane changes must be made safely and efficiently; and there are times when the lane change must be postponed. Following are some illustrated situations where you might want to postpone your lane change until the traffic conditions are more suitable.

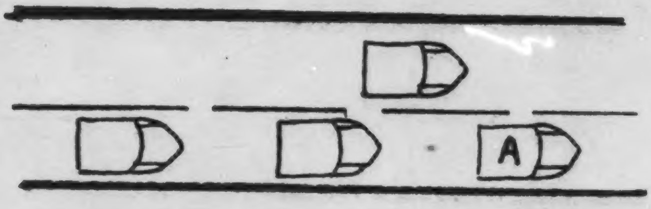
Reasons for lane change postponements:



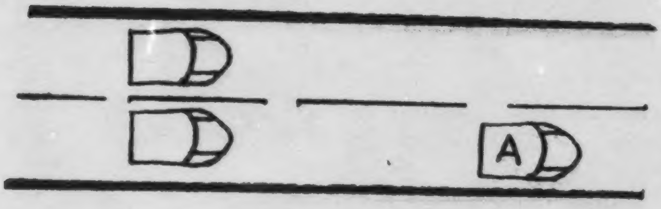
1. *When you are being overtaken by another vehicle, note his speed and position in relation to your vehicle.*



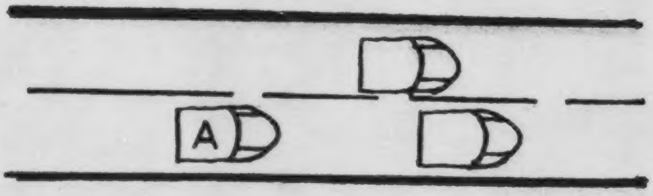
2. *When the vehicle in the next lane is proceeding at the same speed as your vehicle, the traffic pattern does not change.*



3. *When other traffic, side and rear, are continuously lane changing, keep a close check on traffic before you decide to lane change.*



4. *This situation tells you that you will either be passed or that you must accelerate to lane change in front of Vehicle C.*



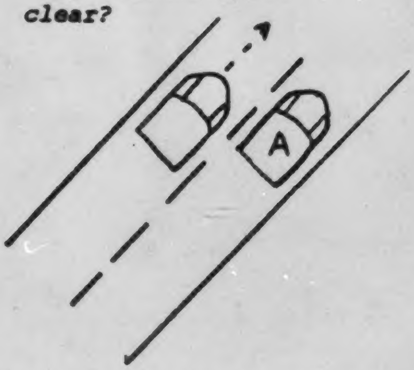
5. *When traffic in the next lane is slowing or it is already moving slow enough to cause congestion potential.*

March, 1979

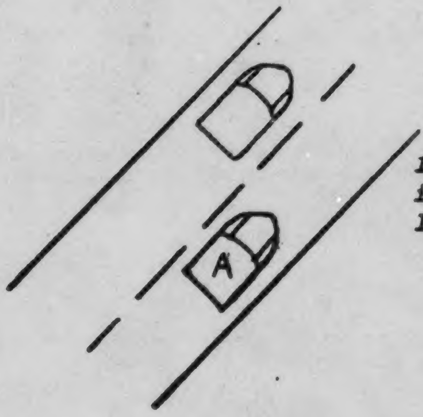
INFORMATIONAL FLYER IF6a
(Page 3 of 4 pages)

Is it safe? Following are some illustrated conditions which might make lane changing an unsafe maneuver:

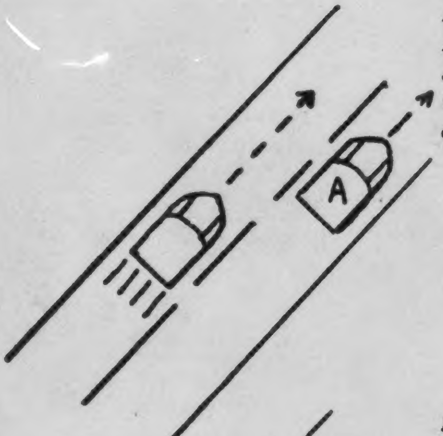
Is your blindspot clear?



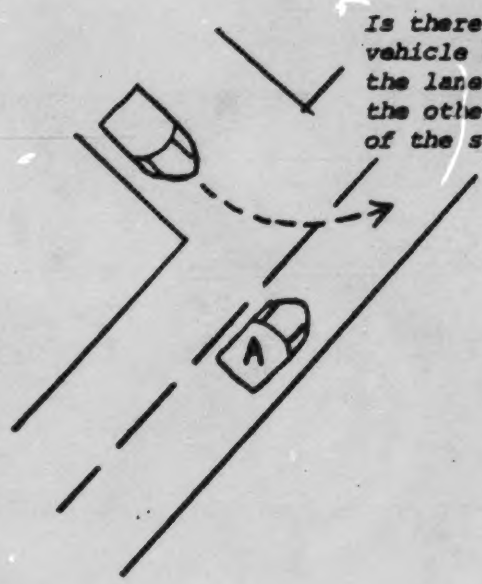
Is there room in the next lane?



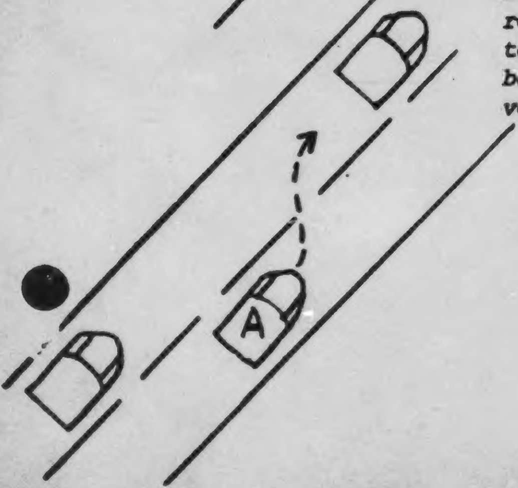
Is the vehicle in the next lane approaching at too high a rate of speed?



Is there a vehicle entering the lane from the other side of the street?



Do you have room enough to change between vehicles?



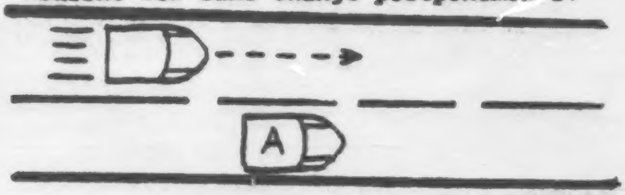
March, 1979

INFORMATIONAL FLYER IF6a
(Page 4 of 4 pages)

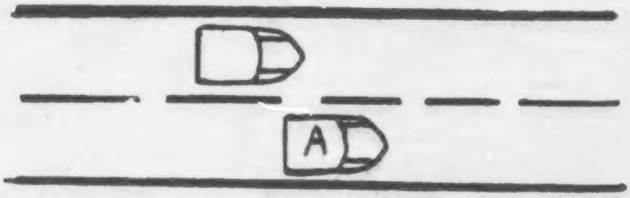
Now that you have checked traffic in all directions and have determined that it is safe to lane change, you are ready to lane change.

Like all other maneuvers, lane changes must be made safely and efficiently; and there are times when the lane change must be postponed. Following are some illustrated situations where you might want to postpone your lane change until the traffic conditions are more suitable.

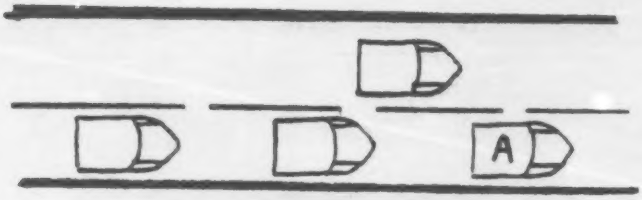
Reasons for lane change postponements:



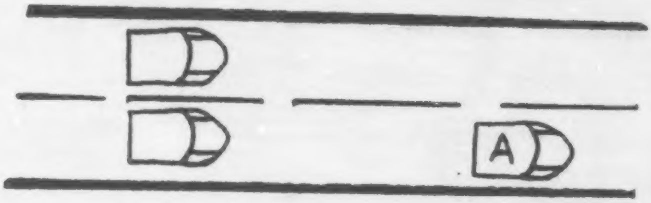
1. *When you are being overtaken by another vehicle, note his speed and position in relation to your vehicle.*



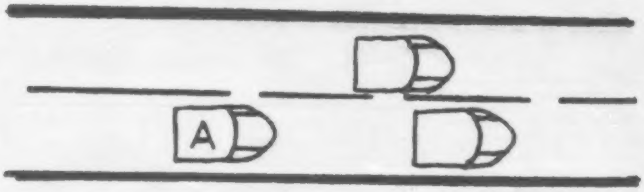
2. *When the vehicle in the next lane is proceeding at the same speed as your vehicle, the traffic pattern does not change.*



3. *When other traffic, side and rear, are continuously lane changing, keep a close check on traffic before you decide to lane change.*



4. *This situation tells you that you will either be passed or that you must accelerate to lane change in front of Vehicle C.*



5. *When traffic in the next lane is slowing or it is already moving slow enough to cause congestion potential.*

March, 1979

WORKSHEET W6a
(Page 1 of 4 pages)

For the following four lane change situations, identify the hazard in each scene. Then, predict what you, as the driver of Vehicle A, must be thinking about. Finally, briefly state your decision concerning the correct action to take.

Situation #1

Hazards identified:

1.

2.

What are your predictions concerning the possible outcome?

1.

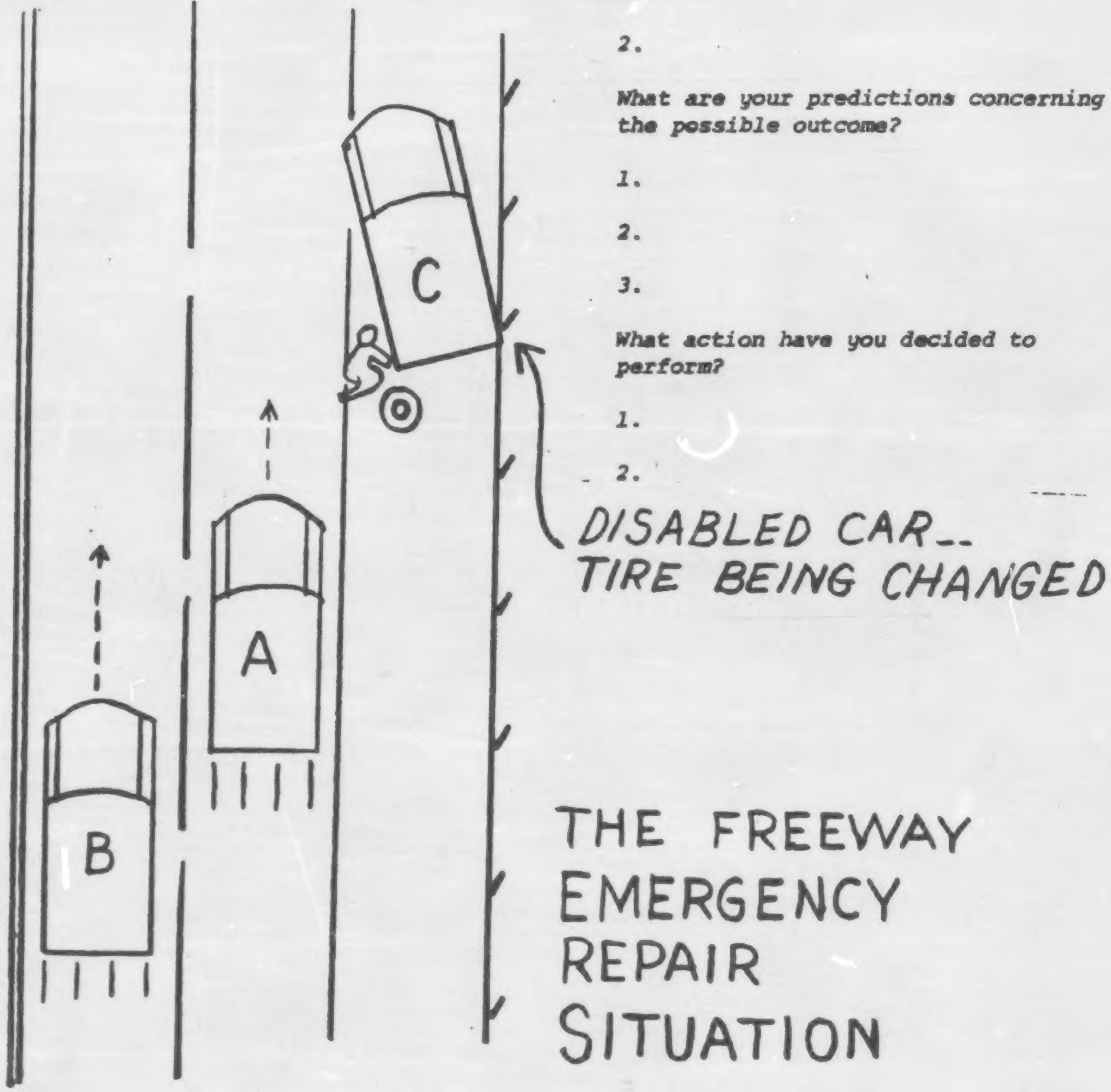
2.

3.

What action have you decided to perform?

1.

2.


C
A
B
DISABLED CAR..
TIRE BEING CHANGED
THE FREEWAY
EMERGENCY
REPAIR
SITUATION

March, 1979

WORKSHEET W6a
(Page 2 of 4 pages)

__Situation #2__

Possible hazards identified:

1.

2.

Predictions made:

1.

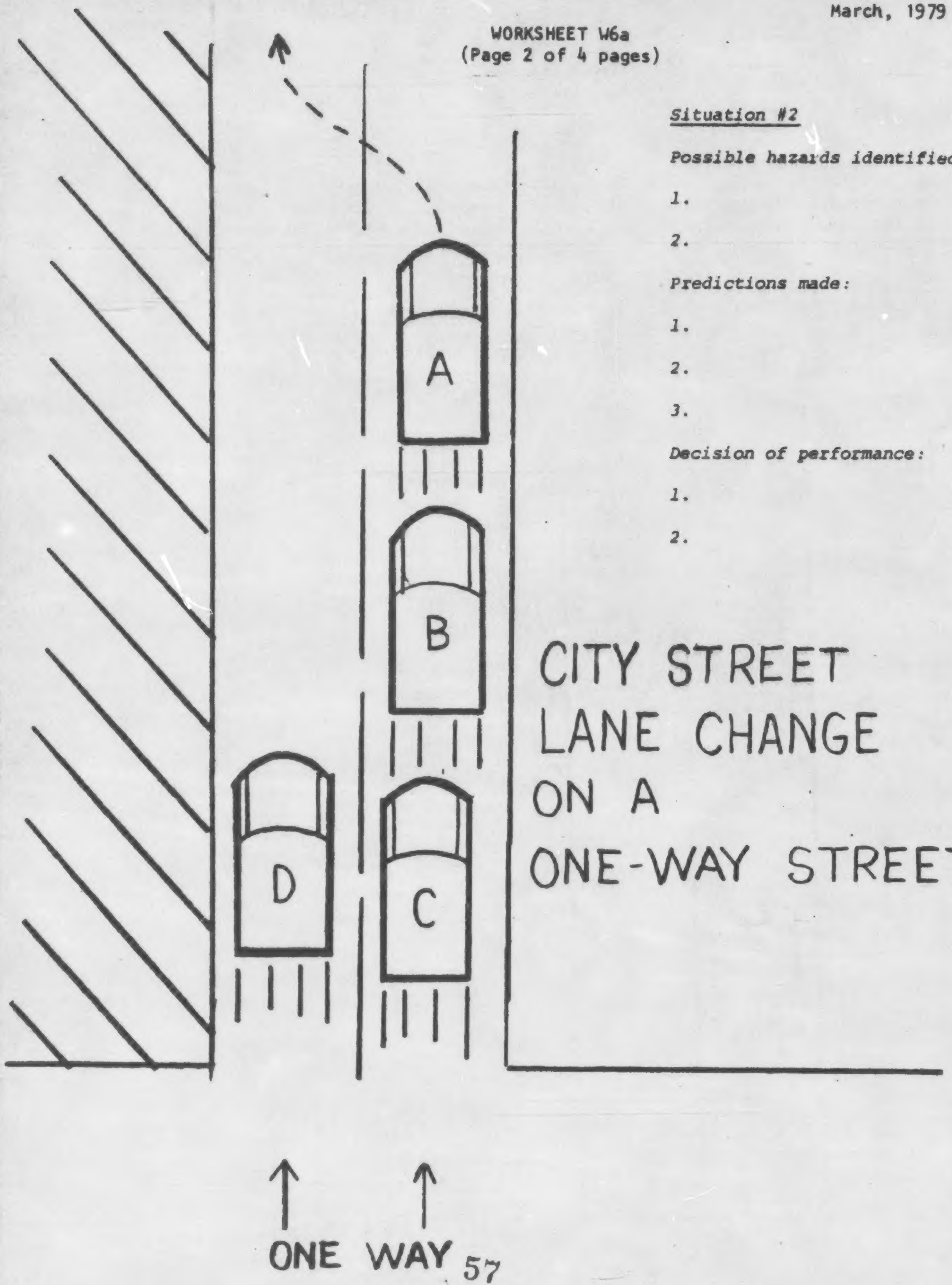
2.

3.

Decision of performance:

1.

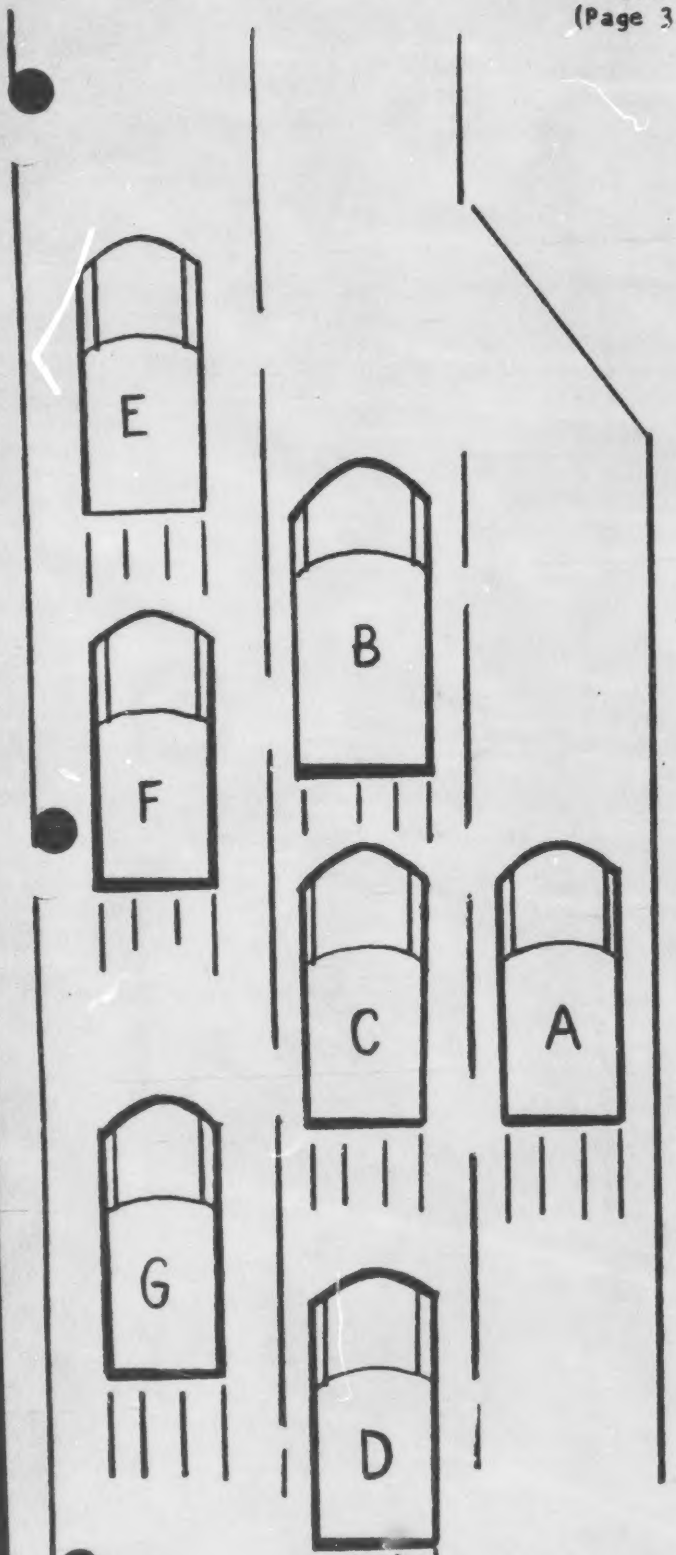
2.



CITY STREET
LANE CHANGE
ON A
ONE-WAY STREET

March, 1979

WORKSHEET W6a
(Page 3 of 4 pages)



Situation #3

Identify possible hazards:

1.

2.

3.

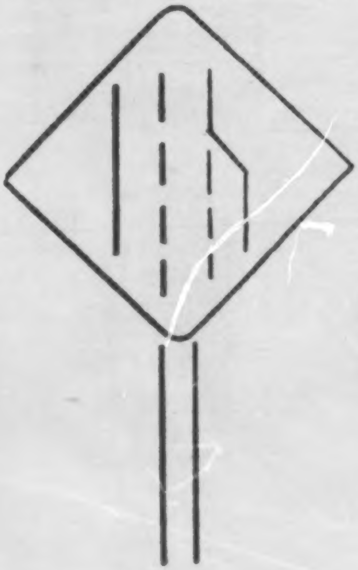
Predict possible outcome:

1.

2.

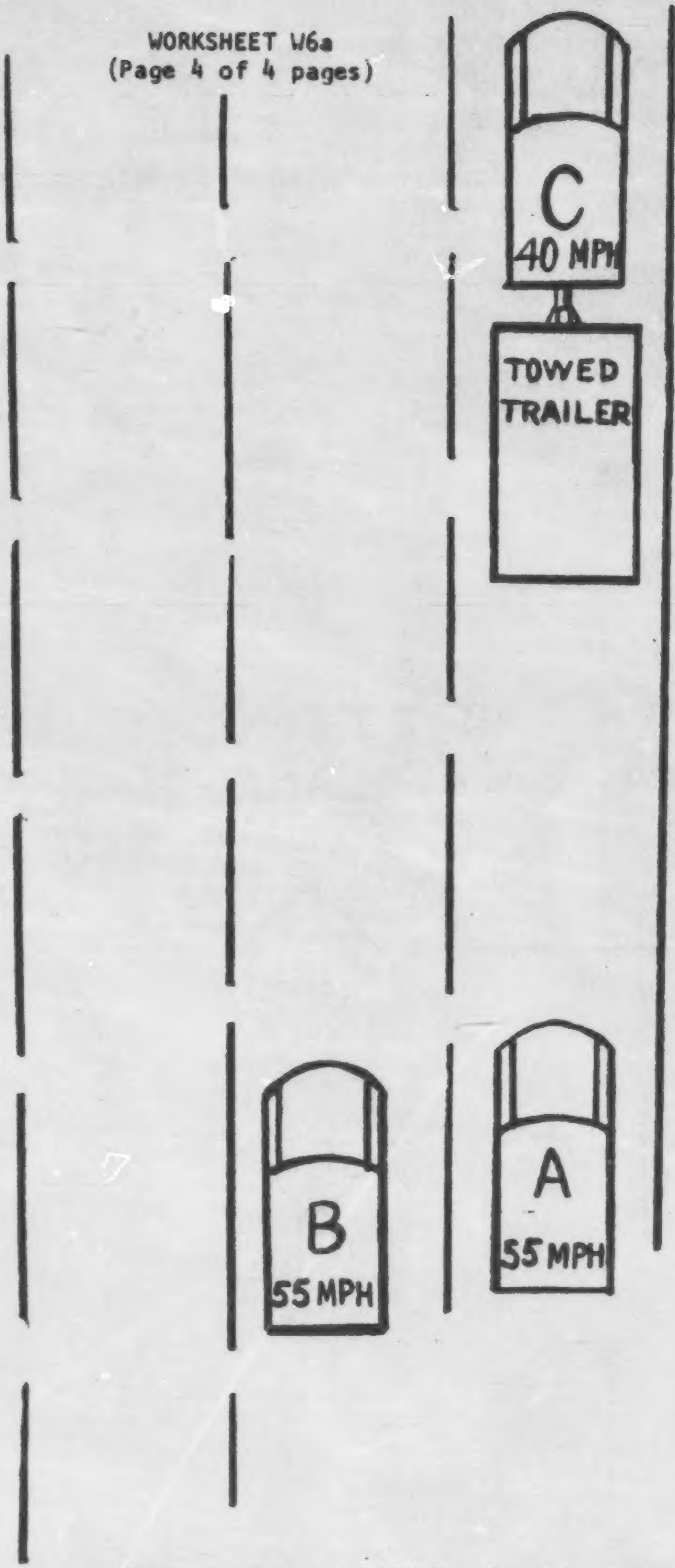
Decide what action you will take:

THREE CROWDED HIGH SPEED LANES NARROWING INTO TWO LANES



March, 1979

WORKSHEET W6a
(Page 4 of 4 pages)



Situation #4

Identify hazards:

1.

2.

Predict possible outcome:

1.

2.

3.

Decide what to do:

1.

2.

FAST MOVING FREEWAY TRAFFIC ENCOUNTERING A SLOWER MOVING VEHICLE

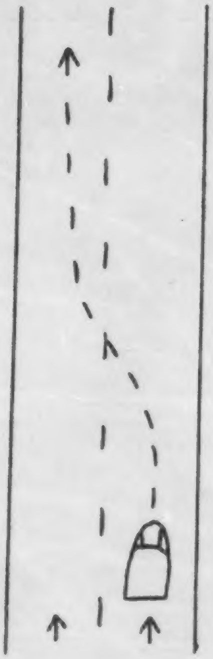
Now, compare two of the situations you have just completed. What are the differences in the decisions that you made? What factors played a part in how you reacted to these various scenes?

March, 1979

WORKSHEET W6b
(Page 1 of 1)

FACT PACKAGE

DIRECTIONS: In a group or by yourself answer the questions for the 4 fact situations.



1. The Facts:

In making a lane change.

You should:

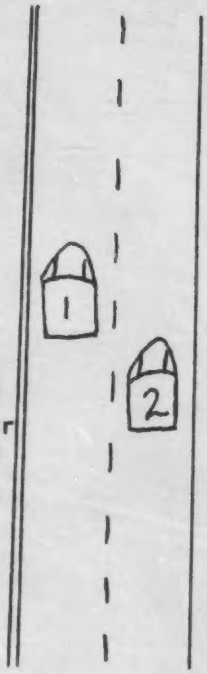
A. Check blind spots.
B. Signal what you are going to do.
C. Drive at the same speed or speed up a little.
D. Do all of the above.

2. The Facts:

You are in Car 1. You want to move to the right lane.

What should you do?

A. Move right at once.
B. When one car length ahead, move right.
C. Accelerate to when you see the front of the other car in your rearview mirror, and then change.
D. Slow down 'till you are behind Car 2, then change.

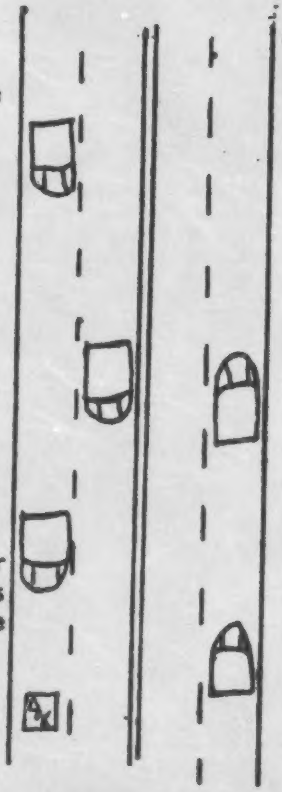


3. The Facts:

You are driving on a highway. You see a large box ahead of you in your lane. You are in the right lane.

You should:

A. Pull over on the shoulder & go ahead.
B. Slow down and drive over the box.
C. Look into your rearview mirror to see if it is safe. Then move to left lane.
D. Stop on the highway & remove the box.

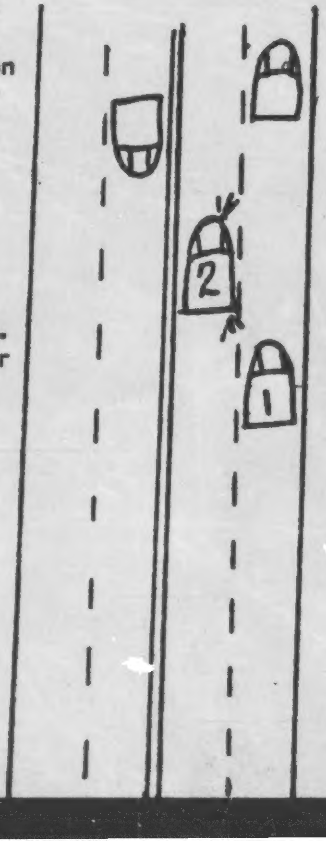


4. The Facts:

You are in Car 1 on the highway. Traffic is heavy. Car 2, on your left, wants to go into your lane.

You should:

A. Keep going at the same speed.
B. Speed up so Car 2 can get behind you.
C. Slow down so that Car 2 can get in front of you.
D. Blow your horn to warn Car 2.



TEACHER-LED DISCUSSION
(Student Learning Activity #5, Module 6)

Student should have completed IF6a and Worksheets W6a and b before participating in this discussion.

1. What question should be asked before making a lane change?

   Answer: "Do I need to change" or "Is there a reason for the lane change?"

2. What are "good" reasons for a lane change?

   Answer: Slow moving vehicle, lane ends, need to turn left when in right-hand lane, vice versa, lane blocked, to minimize hazards.

3. What are reasons for not making lane changes.

4. Review lane change procedures and seek brief answers on the meanings of the various criteria.

5. Review completed Worksheets W6a and b and discuss student answers.

EVALUATION E6a
(Page 1 of 2 pages)

Directions: Write the letters of the correct answers on the separate answer sheet. A total of 7 points is needed to pass.

(No. 1-7, 1 point each)

1. Which of these should a driver usually avoid when getting set to change lanes?

   a). holding speed constant
   b). scanning
   c). accelerating slightly
   d). slowing down

2. What are the procedures in sequence for initiating lane changes according to the "__________________School District Driving Task Procedures and Criteria?"

   a). mirror, head check, signal, go
   b). mirror, signal, head check, go
   c). head check, mirror, signal, go
   d). signal, head check, signal, go

3. What is the most important thing a driver must do before changing lanes?

   a). signal
   b). make sure it is clear
   c). accelerate slightly
   d). look in the mirror

4. You are in light traffic. One block ahead your lane is blocked. A car driving beside you. Which is the best action to take?

   a). brake, drop back, and look for a gap
   b). stay even with him until he lets you in
   c). stop before reaching the block and then enter the other lane as you would if leaving a parking space
   d). accelerate and move into the gap ahead

5. When do you have the right to change lanes?

   a). after you have signalled to others
   b). after you have looked for cars
   c). when you have a safe, clear gap
   d). anytime you want to

6. You are traveling on a 4-lane street at the speed limit. You want to change lanes from the right-hand lane to the left lane but notice a car gaining on you in the left lane. You should:

   a). speed up before making your lane change
   b). make your lane change and then speed up so as to not hold up the car behind
   c). postpone the lane change until the car behind passes you
   d). turn on your signal so the car behind will slow down

EVALUATION E6a
(Page 2 of 2 pages)

7. You are in a "solid line" of traffic in the left-hand lane. You see a driver ahead trying to change lanes from the right lane to the left lane. You should:

   a). let the driver change lanes in front of you
   b). you should continue to keep closed on the car ahead as each of those behind you has the right to continue moving without losing space
   c). speed up so the driver can change lanes behind you
   d). change lanes to the right to allow the driver to move into your slot

(No. 8, 3 points)

8. List three "good" reasons for making a lane change.

3/79

MODULE 7: PASSING

OBJECTIVE

WHEN PRESENTED WITH A SERIES OF OBJECTIVE QUESTIONS RELATING TO PASSING, THE STUDENT WILL RESPOND WITH 75% ACCURACY.

IN THE DRIVER EDUCATION CAR, THE STUDENT WILL DEMONSTRATE PASSING ON A TWO-LANE ROADWAY USING CORRECT PROCEDURES AND APPROPRIATELY APPLYING HUMAN FUNCTIONS, ACCORDING TO THE CRITERIA AS OUTLINED IN "__________ SCHOOL DISTRICT DRIVING TASK PROCEDURES AND CRITERIA."

CONCEPTS

Basic passing procedures
Search patterns (identification)
Time-Distance factors
No passing (Illegal-Unsafe)
Positioning of vehicle prior to pass and "running start"
Point of decision in passing
Passing tips
Aborting a pass
Passing on a multiple lane roadway
Being passed

STUDENT LEARNING ACTIVITIES

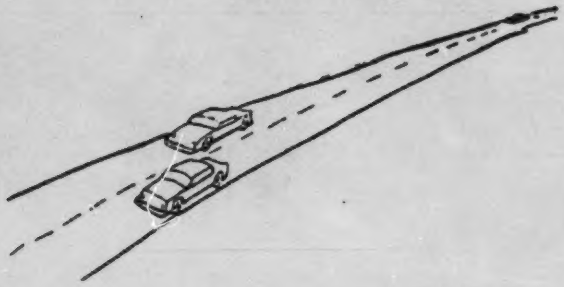
1. Independently read textbook ____________________, pp. ____________.
2. In a classroom or small group setting, view slide tape program S7a/ or independently read Informational Flyer IF7a.
3. In a classroom or small group setting view Aetna Response Series Filmstrip-Cassette program, "Principles of Passing." While viewing, answer and briefly discuss as a group the questions posed on the filmstrip.
4. In groups of 3-4, recite and quiz each other on procedures and criteria as found in "____________________ School District Driving Task Procedures and Criteria."
5. Independently complete Worksheet W7a.
6. In a classroom or small group setting participate in a teacher-led discussion on passing.
7. In the driver education car, practice passing and being passed on a two-lane roadway in coordination with another driver education car or another car driven by an adult licensed driver (leapfrogging).

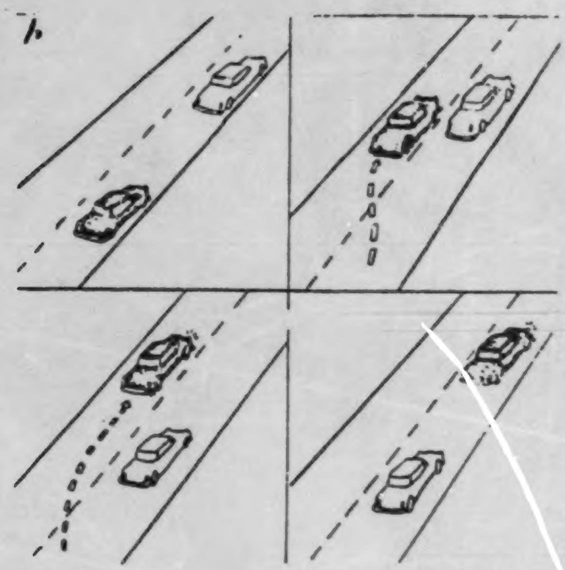
EVALUATION

1. Complete Evaluation E7.
2. Demonstrate on a two-lane roadway correct passes using human functions in at least 2 out of 3 attempts. Demonstrate correct procedures while applying human functions when being passed on a two lane roadway in at least 2 out of 3 times.

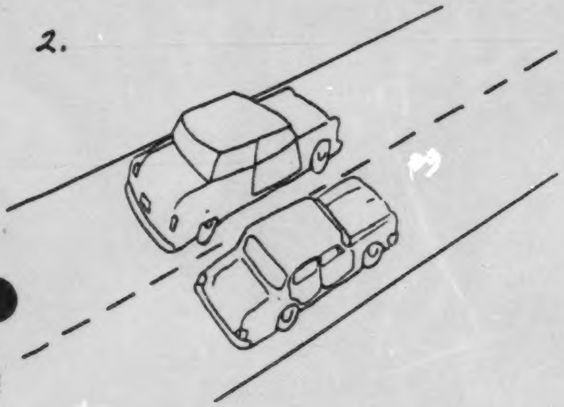
INFORMATIONAL FLYER IF 7a (Page 1 of 12 pages) May, 1979

PASSING ON A TWO-LANE HIGHWAY





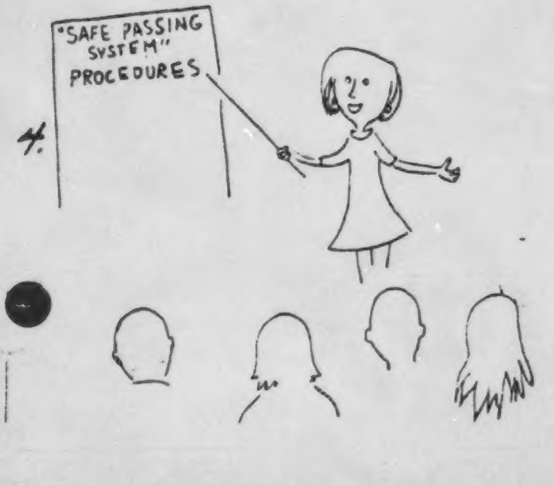
1. The driver of a car about to overtake another car on a two-lane highway waits for just the right moment, accelerates around the leading vehicle, and eases back into the right lane. It sounds easy. And, to a good driver, the passing maneuver isn't all that difficult. But, it requires many quick, accurate calculations to pass another vehicle safely, for it's a potentially dangerous move.



2. Whenever you pass another vehicle on a two-lane highway, for several seconds you occupy the same lane as oncoming traffic. A miscalculation, a moment of inattentiveness, a brief surrender to frustration or anger, and you suddenly can be involved in the most deadly of all traffic accidents-the head-on collision.

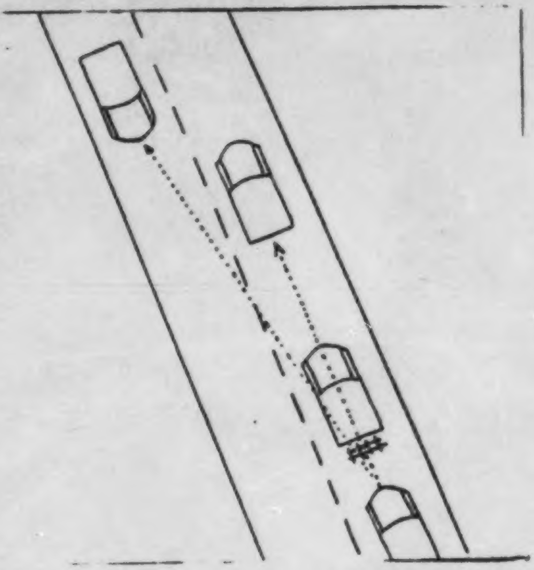
3. It is extremely important, then, that drivers learn to pass safely and efficiently. Safe and efficient passing hinges upon good judgment plus a systematic pattern of action.

The purpose of this exercise is to aid you in making good passing decisions and to provide you with information and procedures to execute your passes safely and efficiently.



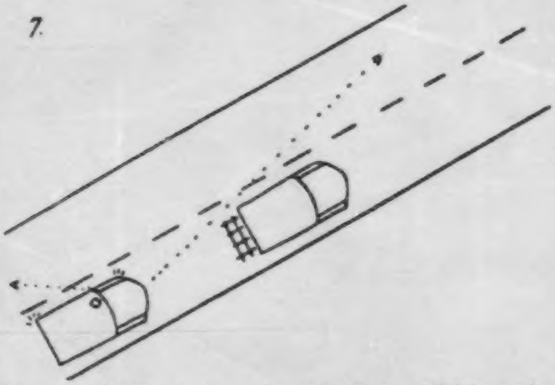
4. In order to pass other vehicles safely, a driver needs to develop a safe passing system. That system should be used every time a driver passes in order that every pass will be a successful one. Following are ten steps for successful passing.

5.



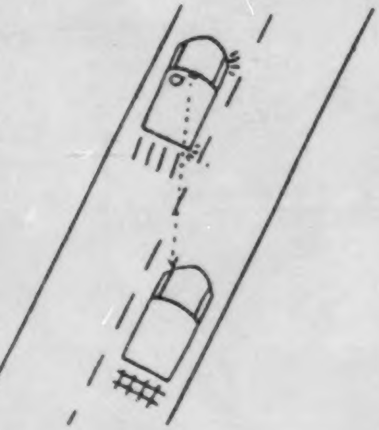
5. Look ahead for a safe passing distance. Stay far enough behind the car to be passed and make sure there is room for you in front of it.

7.

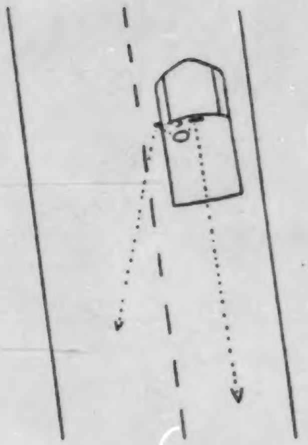


7. Give a left-turn signal for pulling into the left lane. Check your path ahead and signal the driver ahead with your horn, if necessary. Glance over your left shoulder to be sure no car is in the passing lane, preparing to pass you.

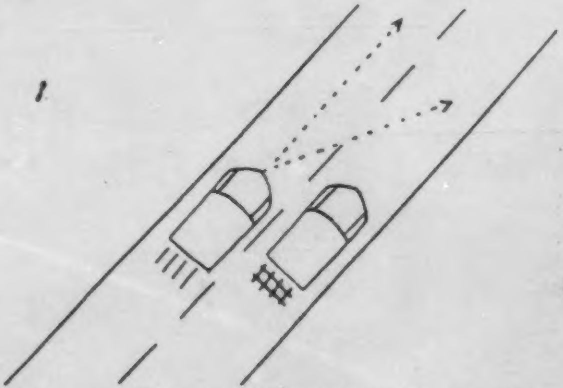
9.



6.



6. Check both mirrors.



8. Speed up and move into the passing lane. Turn off your left-turn signal.

In the passing lane where you can see better, take another good look. Recheck conditions ahead. Drop back if they are not safe.

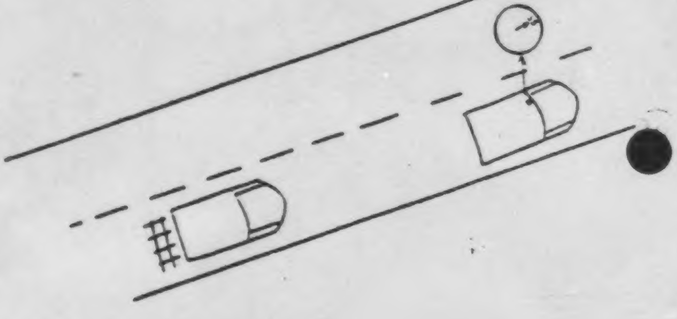
9. Stay in the left lane until you can see the front of the passed vehicle in your inside mirror.

Give a right-turn signal for returning to the right lane.

Head check right and return to the right lane.

10. Turn off your signal and check your speedometer.

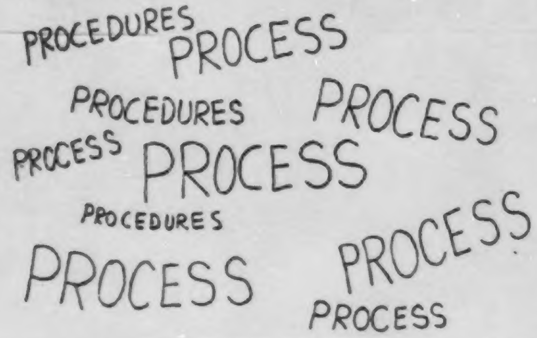
10.



11

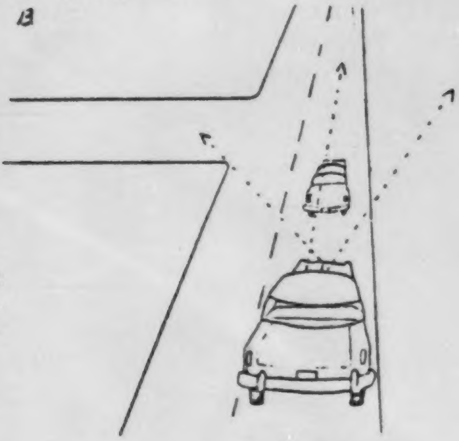
PART II

SUCCESSFUL PASSING



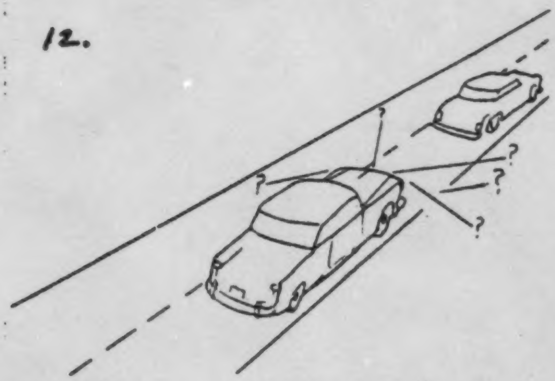
11. Just having a series of steps of procedures to follow will not necessarily make you a safe passer. You must develop a process for making sure that each step in your passing system is adequately completed. Following are some questions which will help you determine what you need to know about each step of the basic passing procedures. When you can answer all of these questions, and apply what you have learned when you attempt to pass other vehicles then you will have developed a process for allowing you to pass safely and efficiently every time you pass.

13



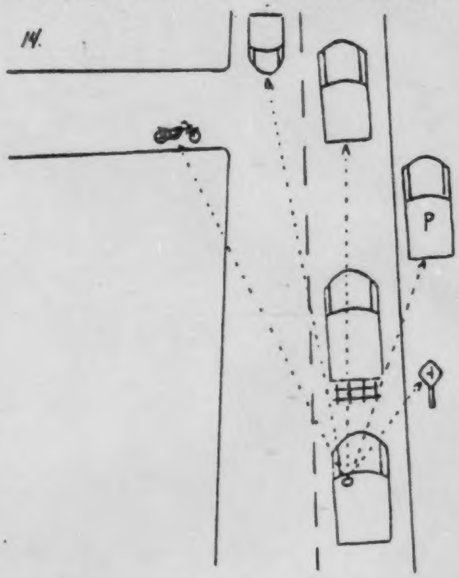
13. To be able to identify those things which are important for you to pass someone safely and efficiently, you must know where to look. Before you pass, then, you want to look ahead of the vehicle you want to pass, and not just [illegible] the roadway itself. Look through the vehicle ahead of you by looking through his windshield and over his vehicle. Also, look to both sides of the vehicle you are intending to pass. There could be things along the roadway that might make the driver ahead of you swerve suddenly into your intended passing area.

12.



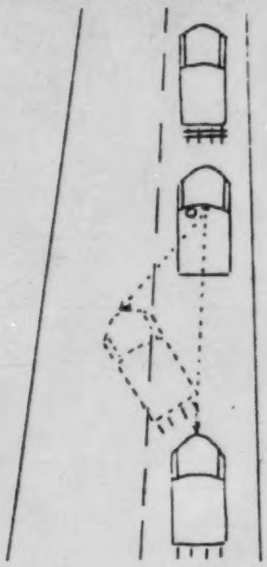
12. Where should you look when you want to identify where it is safe to pass? When you look ahead of the car you want to pass, what are you trying to identify? How can you judge whether or not there is enough time and distance for you to pass? What is a running start? Where do you position your vehicle before you pass? What is the "point of decision"? Do you know when it is legal and illegal to pass? When would you want to "abort" a pass? Do you know what to do when someone wants to pass you? Do you need to signal when passing?

14.



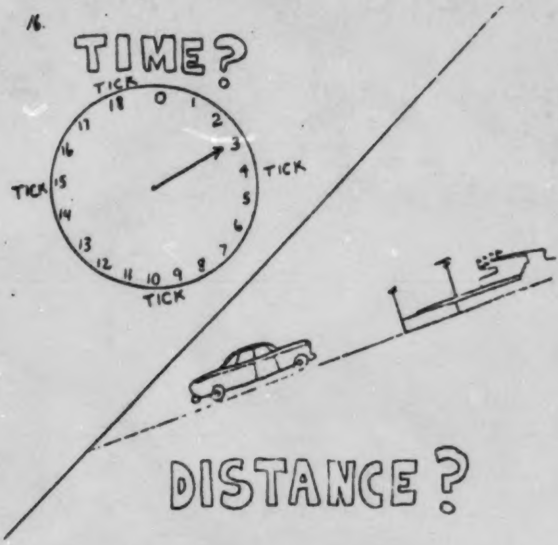
14. So, what are you trying to identify ahead before you pass? Look for oncoming vehicles, pedestrians, and cyclists alongside the roadway, intersections, or congested areas ahead, illegal or unsafe passing zones, stopped and parked vehicles in or alongside the road, and any other hazard that might make passing at that time an unsafe move.

15.



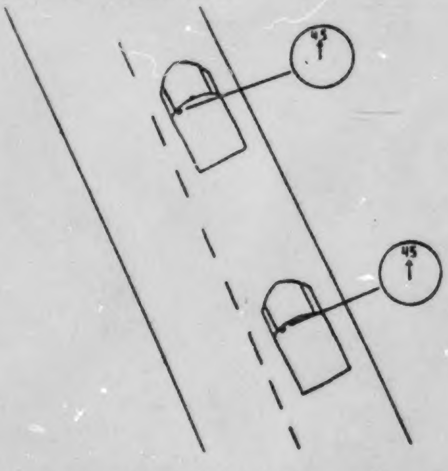
15. A driver must also be able to identify hazards to his rear before attempting a pass. Always check both your rear and side view mirrors for vehicles that may be closing or even attempting to pass you. Sometimes a vehicle may already have started to pass you, and he may have moved into your blind spot. Therefore, it is important to head check your blind spot before you actually begin your passing maneuver.

16.



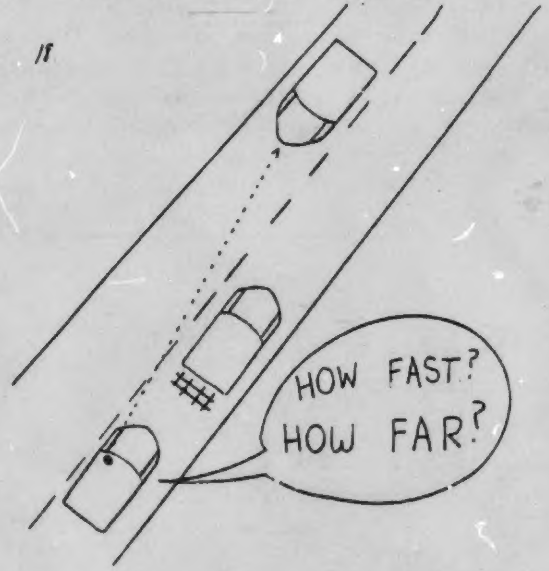
16. Now that you have checked all areas to the front, rear, and sides of your intended passing path, you are ready to make a very critical judgment. How much time and how much distance do you need to safely pass the vehicle ahead of you. To answer this question, you will have to consider several factors.

17.



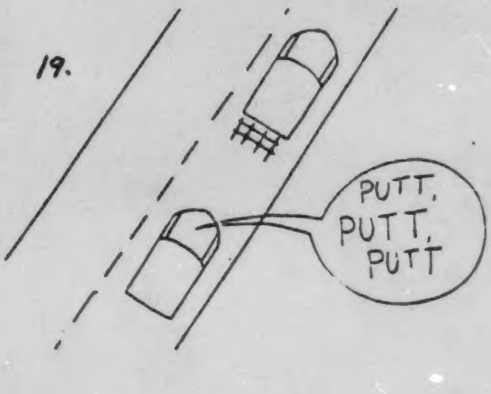
17. What is the speed of the car you wish to pass? To find out how fast the vehicle in front of you is going, maintain a safe distance behind him and then check your speedometer. Your speed will be the same as his, so long as you maintain that safe distance between you and him.

18


HOW FAST?
HOW FAR?

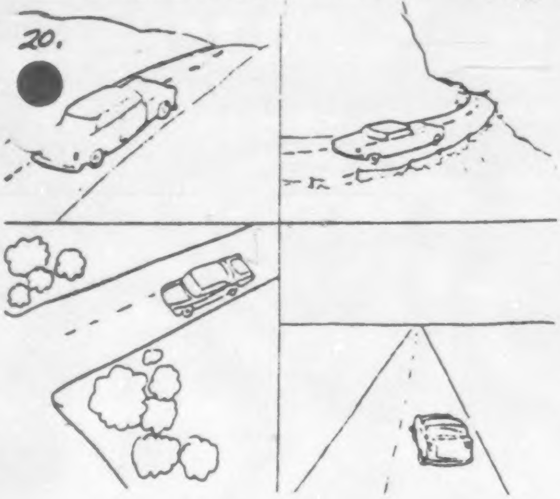
18. What is the predicted speed of the oncoming vehicles? (If any)
How far away is the oncoming vehicle? (If any)

19.



19. Is your vehicle running well enough to accelerate reasonably fast to a sufficient, superior speed.

20.

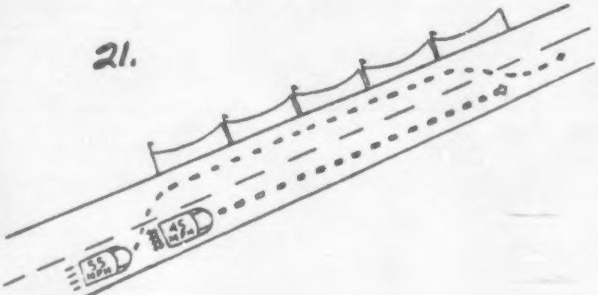


20. Is your visibility ahead clear for a safe enough distance to attempt a pass?

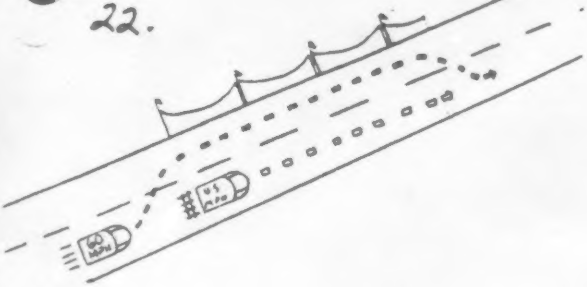
21. Let's look at two passing examples, passing at 55 MPH and passing at 60 MPH. First, we'll pass another vehicle with no oncoming vehicles, and then we'll pass with an oncoming vehicle. Notice how much more time and distance are needed to pass with oncoming vehicles. This is because the oncoming vehicle is covering the same amount of ground as you, while traveling toward you. Remember, also, that these times and distances are the minimum required. Passing with no oncoming traffic. Vehicle you are passing is traveling 45 MPH. While passing, your vehicle is traveling 55 MPH. To pass safely, you will need the length of about five football fields.

22. Vehicle you are passing is traveling 45 MPH. While passing, your vehicle is traveling 60 MPH. To pass safely, you will need the length of nearly 3½ football fields.

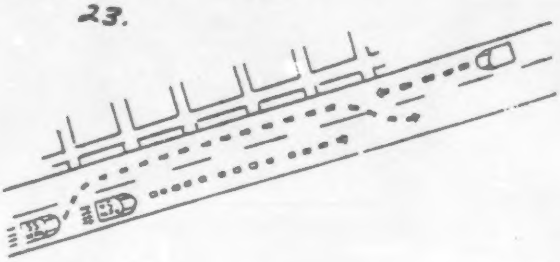
21.



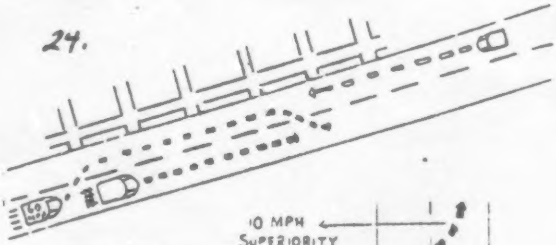
22.



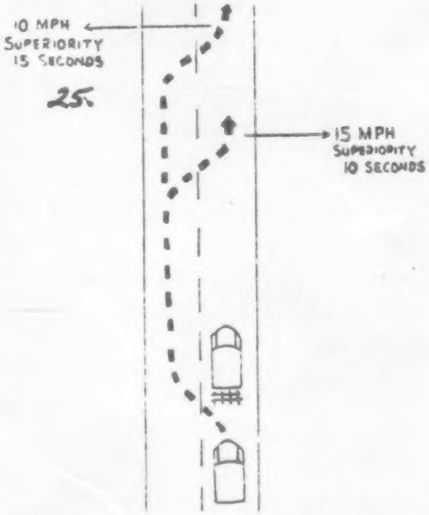
23.



24.



25.

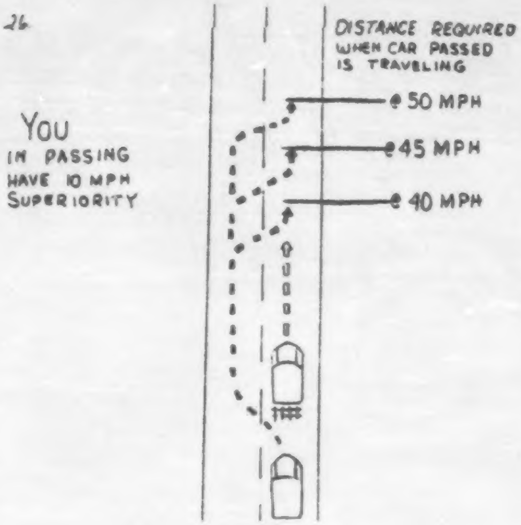


23. Passing with oncoming traffic - Vehicle you are passing is traveling 45 MPH. While passing, your vehicle is traveling 55 MPH. To pass safely, you will need nearly 1/2 mile, or five city blocks.

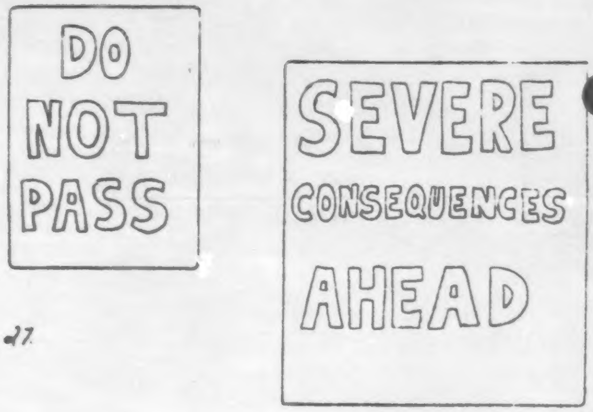
24. Passing with oncoming traffic - Vehicle you are passing is traveling 45 MPH. While passing, your vehicle is traveling 60 MPH. To pass safely, you will need about 3½ city blocks.

25. Now, you will notice that we used examples of 10 MPH speed superiority, and 15 MPH speed superiority. With 10 MPH speed superiority, it takes about 15 seconds to pass. With 15 MPH speed superiority, it takes about 10 seconds to pass. So, when your speed superiority is the same, (speed superiority equals ho[illegible] much faster you are going than the person you are passin[illegible] it will take the same amount of time to pass, whatever t[illegible] speed that is being traveled. However, as you increase your speed superiority, you will need less distance to pass, for your vehicle will be covering more ground per second. A 15 MPH superiority is generally accepted as the most favorable difference in speed.

26


DISTANCE REQUIRED WHEN CAR PASSED IS TRAVELING
@ 50 MPH
@ 45 MPH
@ 40 MPH
YOU IN PASSING HAVE 10 MPH SUPERIORITY

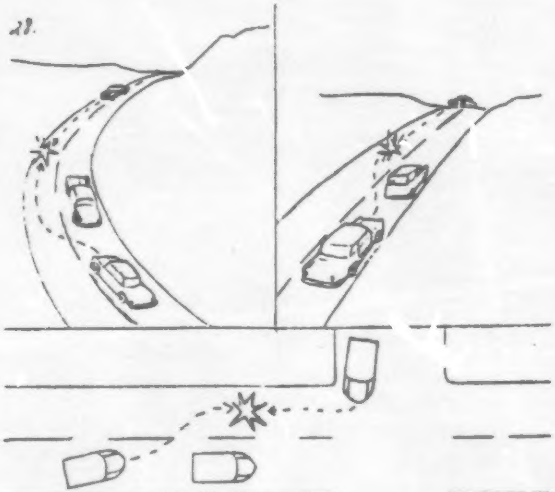
26. But, probably one of the most important things of all to remember about passing another vehicle is this. The faster the vehicle is going that you intend to pass, the more distance will be needed for you to safely complete that pass, with the same speed superiority.


DO NOT PASS
SEVERE CONSEQUENCES AHEAD

27

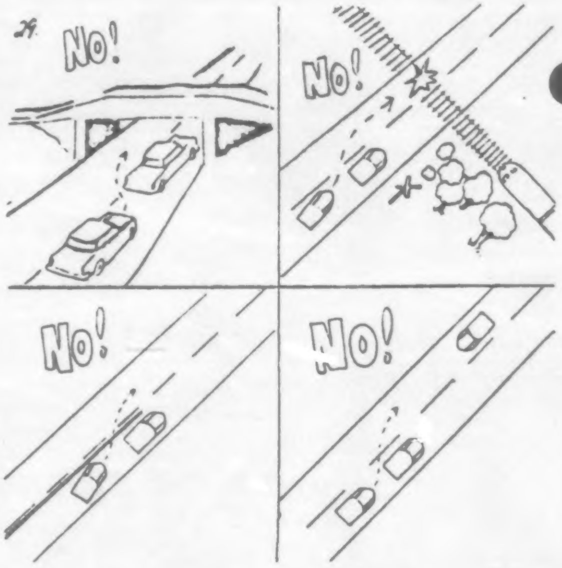
27. There are various situations when a driver should not attempt to pass. Many of these situations are clearly defined by law. Others, however, are situations that must be judged by the driver as simply unsafe. And, whether it is the law that defines a situation as a no-pass zone, or merely conditions that make it so, the results are oftentimes much too severe to ever attempt a pass at these times.

28.



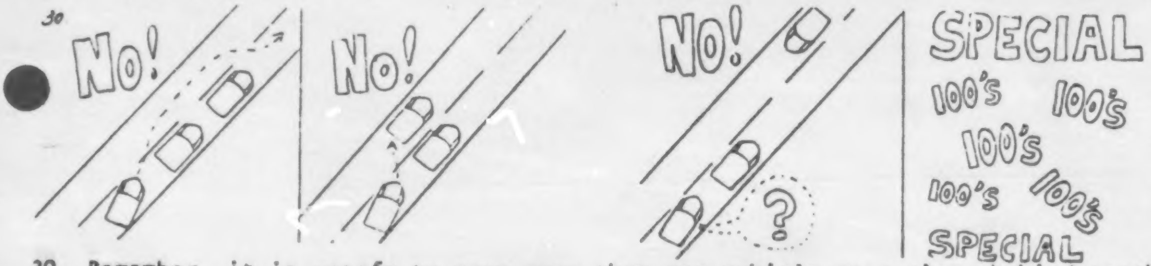
28. Remember, that it is unlawful to pass near blind curves, too close to the top of hills, and too near intersections. Pass must be completed in order to be able to reduce speed for intersections if necessary.

29.



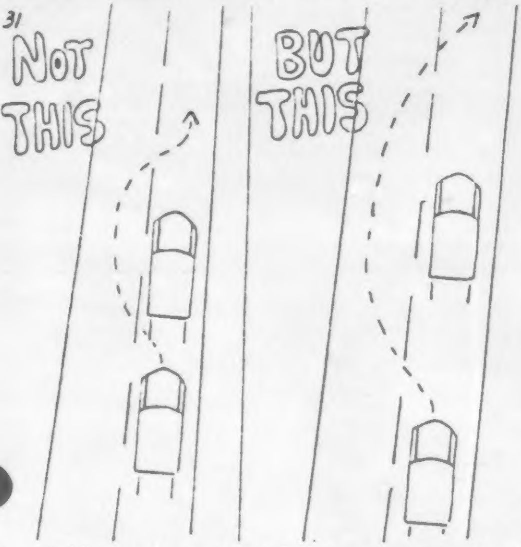
29. It is unlawful to pass too near bridges and tunnels, too near railroad crossings, with solid yellow line in your lane, and with oncoming vehicle too close. It is too close if you interfer with his normal movement.

30

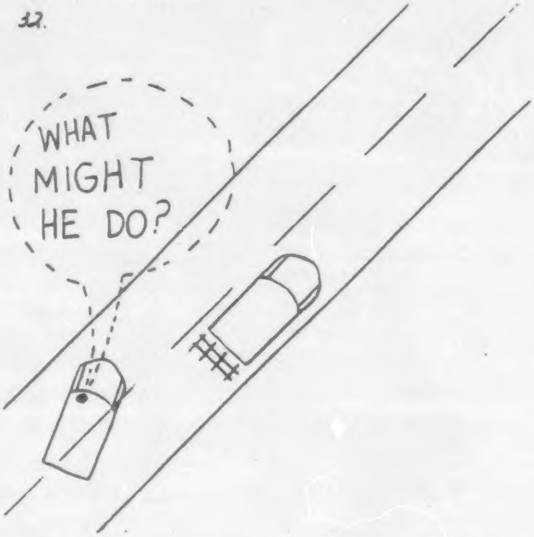


30. Remember, it is unsafe to pass more than one vehicle at a time, behind another vehicle that is also passing at the same time, when in doubt about having enough clear distance to complete pass, and in hundreds of special cases.

31



32.


WHAT MIGHT HE DO?

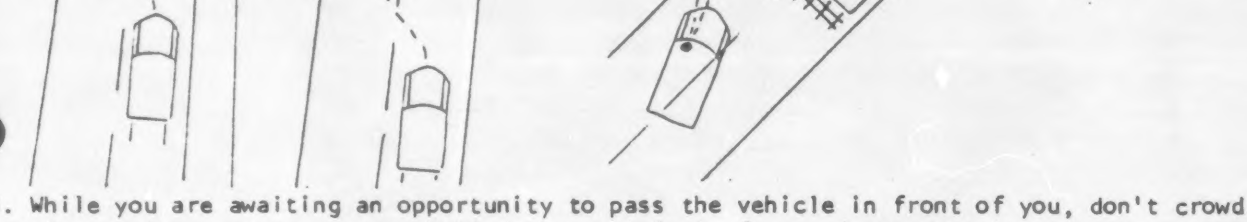
31. While you are awaiting an opportunity to pass the vehicle in front of you, don't crowd. That is, don't move up so close behind the vehicle in front of you that it reduces your area of vision. Also, what if the vehicle ahead suddenly stops or slows down? Keep a reasonable distance between you and the vehicle you wish to pass.

When it looks like a chance to pass is coming up, start to accelerate. BUT STAY IN THE RIGHT LANE AND DON'T GET TOO CLOSE, and time your move so you will be increasing your speed as the time comes to move into the other lane. If the way is still clear to pass, you will have a "running start" that more than makes up for the distance you dropped back to allow for a space cushion behind the vehicle you wish to pass.

32. You must learn to anticipate the possible driving actions of the vehicle you are preparing to pass. You can only assume that the vehicle you are passing will continue in a straight line, that he will maintain his present speed, and that he will assist you in passing him. To help you anticipate driving actions of the driver you are about to pass, you must learn to make predictions. That is, what might he do? Or, "what could happen while I am trying to pass that could cause a problem?"

33. Following are some examples of things that might happen when you attempt to pass another vehicle.

33



[illegible]e vehicle you wish to pass may drift into the oncoming lane as you begin to pass.

The vehicle you wish to pass may swerve sharply into the oncoming lane to avoid something alongside the road.

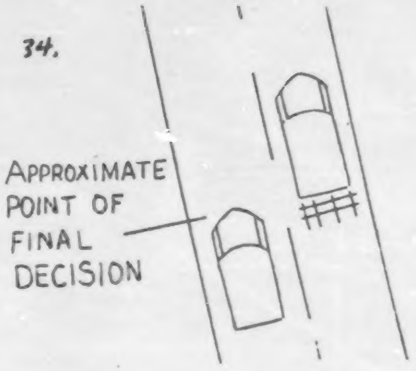
The vehicle you wish to pass may speed up just as you begin to pass.

The vehicle you wish to pass may decide to pass someone ahead of him as you decide to pass him.

34. Now, up to this point you have been making predictions as to whether or not you should pass at all. When you make the decision to begin your pass, you should reserve your final decision to complete the pass until you are in the passing lane near the vehicle you are passing. This is called the point of decision. This will put you in a better position to reconsider everything up to this point.

If anything causes you to doubt your ability to safely complete your pass, you will be in a position to brake and pull back into the right hand lane. Remember, though, you should proceed to the point of decision as if you were going to complete your pass.

34.



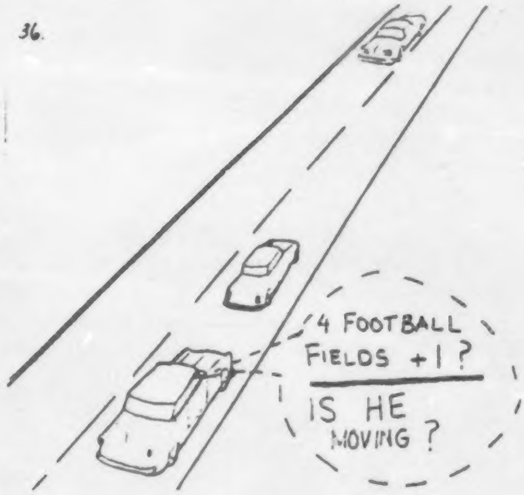
35

"PASSING TIPS" BY JOHN Q. EXPERIENCE

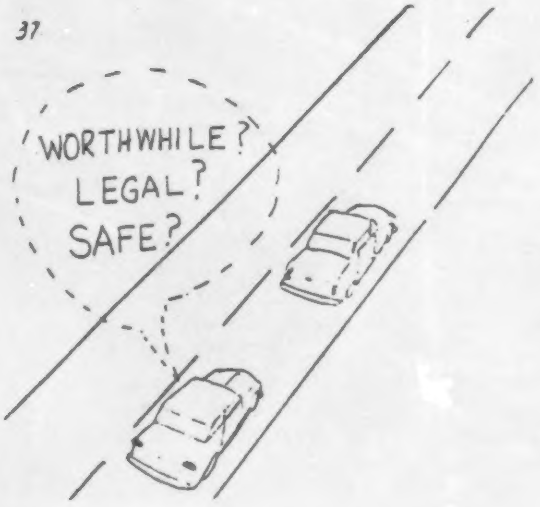
35. No matter how many procedures you may have, no matter how many systems or processes you may learn, nothing can take the place of actual passing practice and experience. Many times, for various reasons, beginning drivers aren't able to get the passing experience needed to become proficient at passing safely and efficiently.

When this is the case, it is nice to be able to learn some of the points of passing from those who have been fortunate enough to have gained the experience. For lack of a better term, let's call these points "Passing Tips". Let's look at some of them and see what they can teach us about passing safety and efficiency.

36.

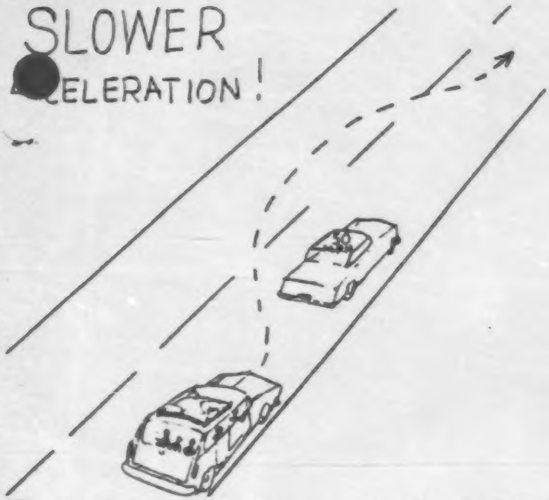

4 FOOTBALL FIELDS +1 ?
IS HE MOVING ?

37


WORTHWHILE ?
LEGAL ?
SAFE ?

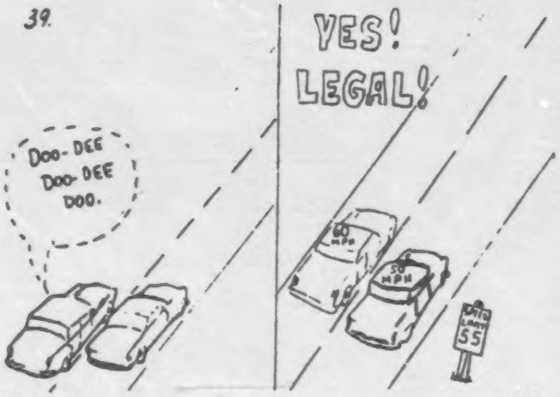
36. When you are figuring how much distance you need to complete a pass, always leave more distance than you think may be necessary, just in case you may have made a mistake in your calculation. One tip to remember is always make sure than an oncoming vehicle is far enough away to look as if it were standing still.

37. If, while you are traveling along, you are keeping pace with the reasonable traffic flow, and you still are considering whether or not to pass a vehicle, ask yourself three questions. First is the pass worthwhile? That is, will it really gain you any time or distance? And, if so, is the time and distance gained worth the effort of a pass? Second, is the pass legal? And third, is the pass safe? Are there any reasons for not completing the pass due to unsafe conditions or location?



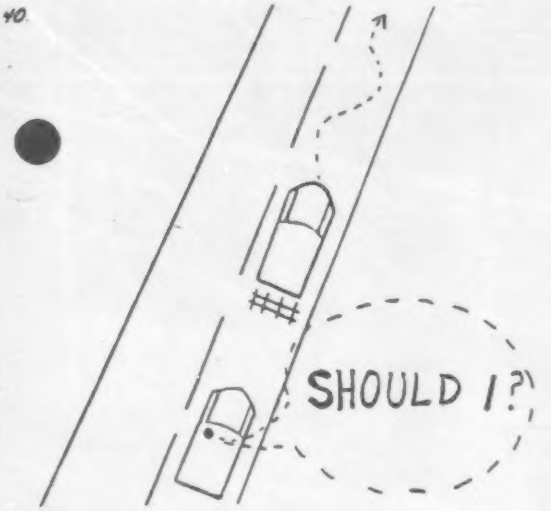
38. Remember that your vehicle can't accelerate as quickly when you are moving at higher speeds. It is also more difficult to get faster acceleration when your vehicle is loaded with passengers and cargo.

39.

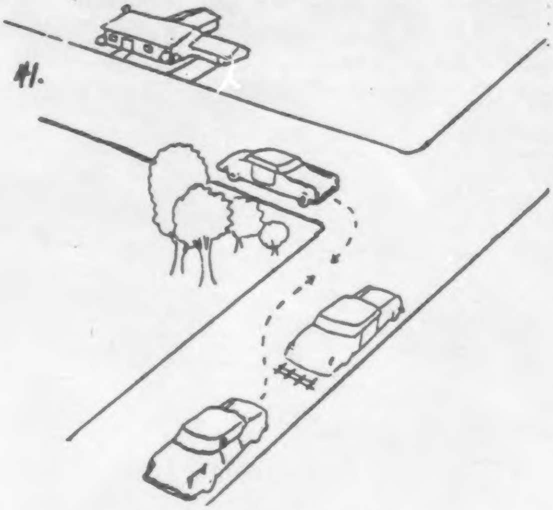


39. Don't "mess around" when you pull out to pass. Build up a clear superiority of speed before you actually pull out to pass. Many people don't realize it, but it is legal to exceed the speed limit in Washington State when passing on a two-lane road when the vehicle being passed is clearly under the speed limit and the vehicle passing returns to the speed limit as soon as the pass is completed.

40.

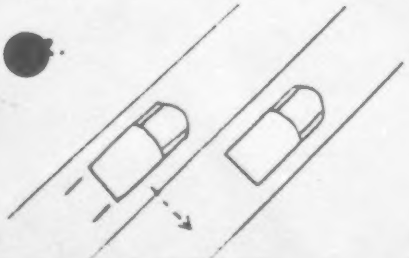


41.



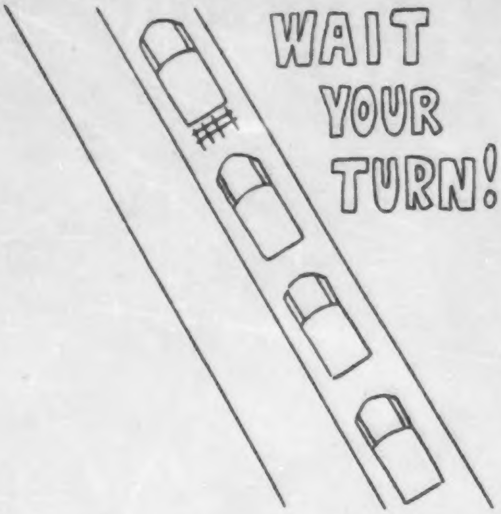
40. If you find yourself following a vehicle that appears to be driving erratically (weaving, slow, then fast, etc.) be extra careful in attempting to pass. You might want to especially allow extra room to the sides of the road, for the vehicle might force you to the side as you pull alongside.

41. Trees, bushes, farm crops, and other environmental blinds could hide side roads or driveways. Be certain that you consider this in order that you are prepared for the sudden appearance of a third vehicle in the passing picture. Also, you should be ready for the vehicle in front of you to suddenly turn left while you are passing. (Naturally, you should avoid passing in situations where these actions are likely. However, sometimes we miss an important clue.)



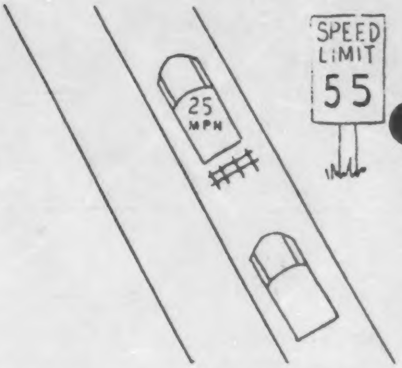
42. While preparing to pass, watch for any clues that the vehicle you are about to pass may be speeding up. The chief clue may be that you seem not to be gaining appreciably even though you have built up your speed superiority over what the vehicle you are passing was traveling. Sometimes a vehicle speeding up will swerve slightly one way or the other. If this happens to you as you are attempting to pass a vehicle, pull back into your lane. Usually you should not attempt to out accelerate the vehicle you are attempting to pass under these circumstances.

43



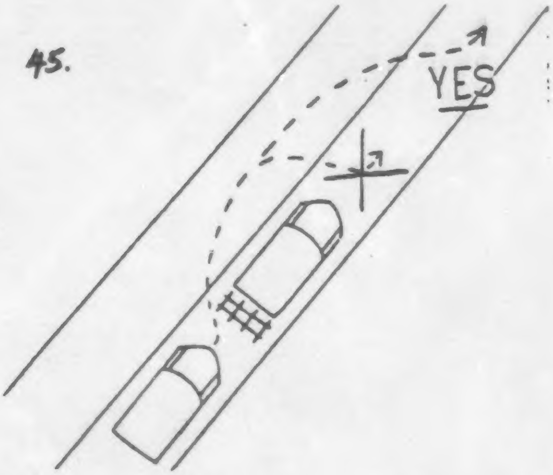
43. Although it is legal to pass more than one vehicle at a time, it is unsafe and very much discouraged. Wait your turn before attempting to pass a slower moving vehicle. Remember, if you try to pass a string of vehicles, you expose yourself for a long time without an escape route and the gain in time and distance is usually little. The risk involved in attempting to pass a string of vehicles just isn't worth it.

44.

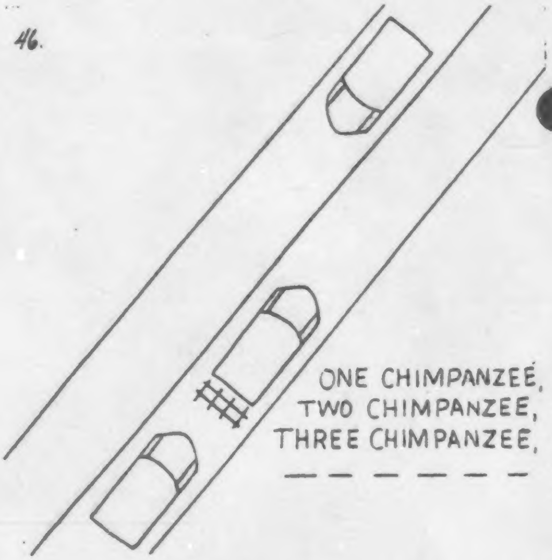


44. Don't overtake a slow moving vehicle too fast. When approaching a slow moving vehicle, consider the various reasons why the driver may be moving at such a slow speed. He may be slowing down for a left turn. Suppose that he decided to turn left just as you pulled out to pass him. Would you be moving too fast to be able to avoid a collision with him? Remember, slow down enough as you approach the slow moving vehicle so that you could stop or maneuver if any action by the slow moving vehicle conflicts with your passing him.

45.



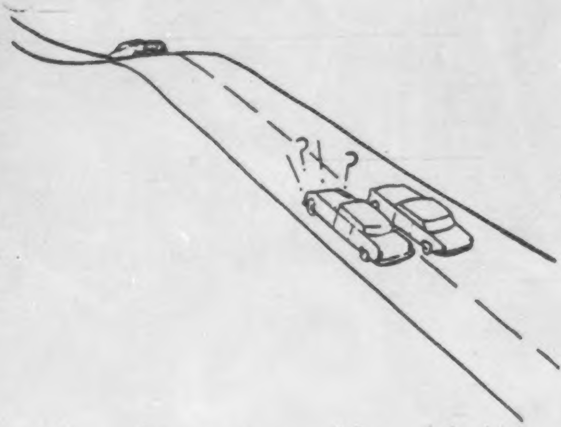
46.



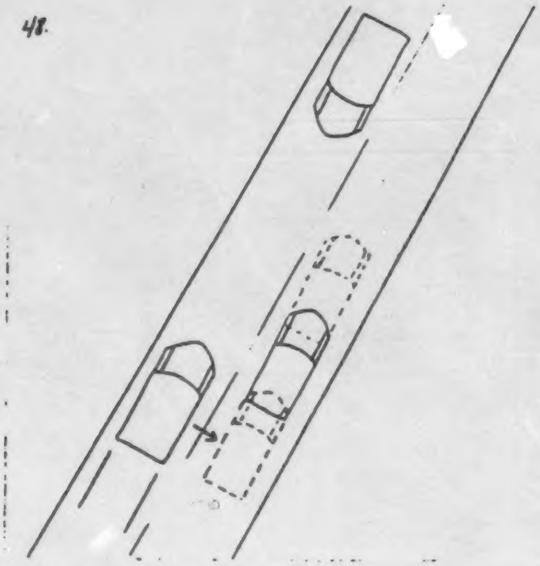
45. Don't "cut in" after you pass a vehicle. Wait until you can see the front of the vehicle you passed or the whole vehicle in your inside rear view mirror before you return to the right hand lane. Remember, give the vehicle you passed the same safe following distance you would like to have before you pull back into the right lane.

46. One last tip. Don't ever make a monkey out of yourself while attempting to pass another vehicle! How can you avoid making a monkey out of yourself? Easy! Just follow the "ten second exercise". Here is how it works. When you find yourself in a passing situation, but you decide not to pass due to an oncoming vehicle, start counting seconds to yourself ("one chimpanzee, two chimpanzees, three chimpanzees", etc), and see exactly where you and the oncoming vehicle are at the tenth second. Would you have made it--or would you have made a "monkey" out of yourself? This little game can accomplish something for you. It can show you what would have happened if you would have guessed wrong--or it can reassure you that your sense of speed and distance is pretty good.

47.



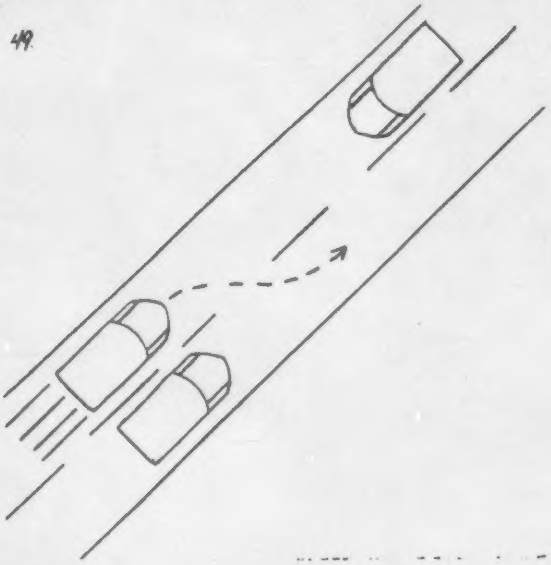
48.



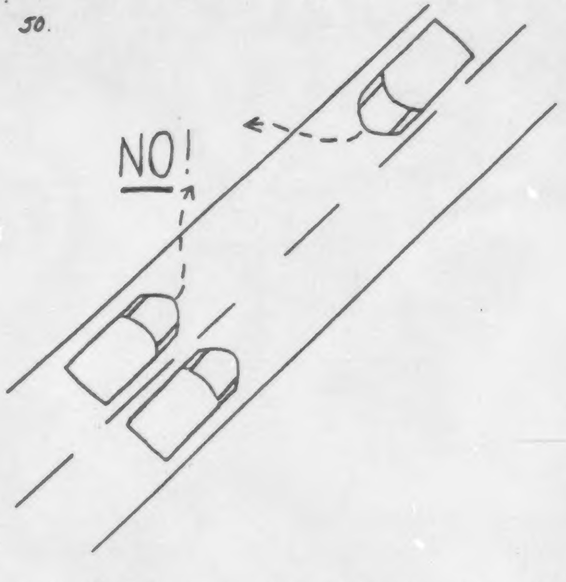
47. Regardless of how careful you are in following the safe passing procedures, there will be times when you just "plain" miss identifying a very important cue. As a result of this, you may find yourself in a very dangerous position, for oftentimes you will already have pulled out to pass before realizing that you are headed for trouble.

48. If, or maybe when, this happens to you, what can you do about it? Every dangerous situation may offer various ways to avoid collision. And, no two drivers will necessarily handle the situation in the same way. However, remember these three things about handling hazardous passing situations. You may be able to "abort" your attempted pass. Aborting a pass means to brake and fall back in behind the vehicle you are attempting to pass.

49.

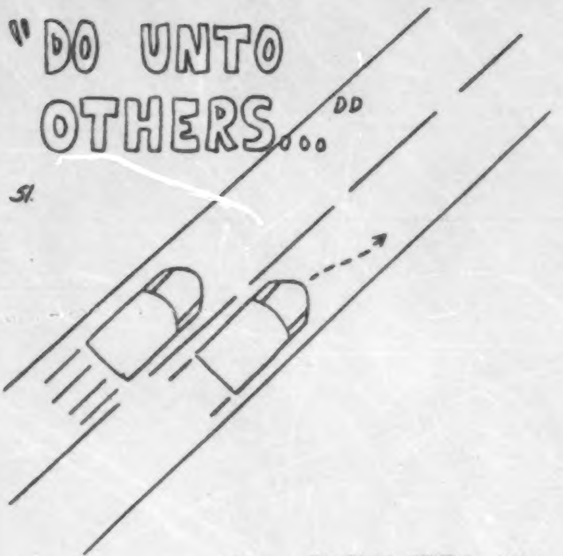


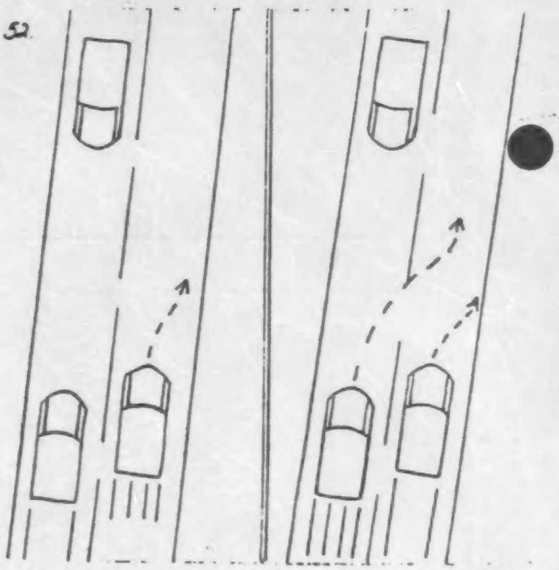
50.



49. If you have accelerated past the "point of decision", then you may want to "stomp" your accelerator to the floor, getting past the vehicle you are passing, and return quickly to the right lane ahead of the vehicle you are passing. Both of these procedures involve a very critical judgment that also involves the vehicle being passed and the oncoming vehicle.

50. Remember, DON'T SWERVE LEFT! If you swerve left, then you have moved into the oncoming vehicle's escape route. So long as the oncoming driver has an escape route to the left, your chances of not being involved in a serious accident are better.



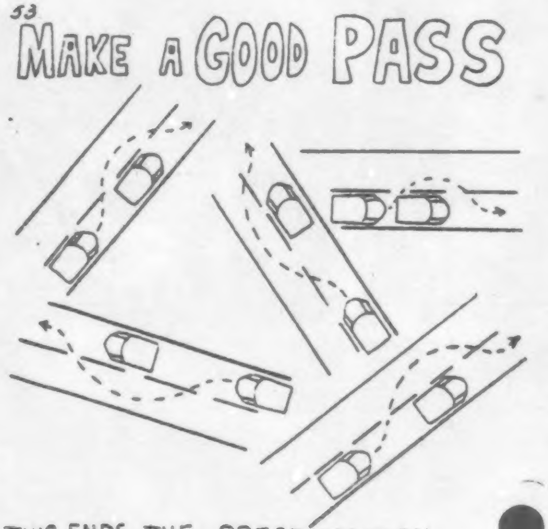


51. So far, in this presentation we have been concerned with the driver who is doing the passing. But, we must also consider how a driver being passed can aid in the safety of a passing maneuver. Perhaps there is no better rule to follow than to merely do for the passing driver what you would like him to do for you if you were doing the passing. Consider these helping aids. When you have noticed that you are about to be passed, maintain an even speed and lane position. Or, you might even slow a little and move a little to the right in your lane.

52. If the vehicle passing you seems to have misjudged the speed and distance of an oncoming vehicle, try to decide what he is going to do about it. If it appears that he has decided to "abort" his pass, and begins falling back, "stomp" your accelerator to the floor and move right in your lane. On the other hand, if the passing driver has decided to accelerate, then you should brake, fall back, move right, and look for an escape route. Remember, help the passing driver, leave yourself an escape route, in case of danger, and most of all, don't panic.

53. Well, what have we learned about passing? Passing requires many quick, accurate calculations on the part of a driver. Since there is very little room for error, passing is a potentially dangerous maneuver. In fact, unless a driver gives all of his attention to his passing attempt, he can become involved in the most deadly of all traffic accidents--the head-on collision.

Does that mean that drivers should be too frightened to pass another vehicle? Of course not. It means that all drivers should be mature enough to approach passing fully prepared, with procedures and a system for making all of their passes safe, efficient passes. This exercise is intended to help you reach that goal.



THIS ENDS THE PRESENTATION....

March, 1979

WORKSHEET W7a
(Page 1 of 1 page)

After each of the passing situations below, check the column that gives the correct answer in the situation at left.

SITUATION (on open 2-lane highway)	UNLAWFUL TO PASS	BETTER TO PASS WHEN SAFE THAN NOT TO PASS	BETTER NOT TO PASS EVEN IF LAWFUL
1. At or near an intersection			
2. Yellow line on right side of center line			
3. Following a tractor			
4. Under or near an underpass			
5. On icy pavement			
6. On or near a bridge			
7. Your engine not running well			
8. On or near a railroad crossing			
9. Nearing a stop sign			
10. Approaching the crest of a hill			
11. When planning to turn off soon			
12. Car behind you trying to pass you			
13. In dense fog			
14. On a blind curve			
15. Oncoming traffic perhaps far enough away			
16. Car ahead passing a parked car			
17. Someone coming up fast behind you			
18. With car ahead as it passes car ahead of it			

March, 1979

TEACHER-LED DISCUSSION
(Student Learning Activity 6, Module 7)

(Page 1 of 1 page)

1. How must you scan the area before deciding to pass?

   Answer: 360°, looking for vehicles that could affect pass, or possible ways by which vehicles may suddenly appear, or other hazards (e.g., pedestrians) that might affect path.

2. What time and distance factors must you consider before deciding to pass?

   Answer: How fast is the vehicle going you wish to pass; the speed of oncoming vehicles; enough clear visibility; the faster the vehicle you are passing is going, the more time and distance needed to pass; "speed superiority", how much faster you are going than the person you are passing.

3. In what situations is it illegal to pass?

   Answer: (a) railroad crossings (b) on curves (c) nearing crest of hill (d) in or approaching intersections (e) on bridges or in tunnels (f) with solid yellow line in your lane (g) with oncoming vehicle too close.

4. Though perhaps not unlawful, what are some situations in which it is unsafe to pass?

   Answer: (a) more than one vehicle at a time (b) when not sure of distance of visibility (c) behind another vehicle that is passing at the same time.

5. What is a "running start"?

   Answer: Increasing speed before moving into the passing lane.

6. What is the point of decision? Approximately what position will your car be in at that "point of decision"?

   Answer: The point of "no return" when you must decide to complete or abort the pass. As you are pulling even with the vehicle being passed.

7. What is meant by aborting a pass?

   Answer: After you had started your pass, changing your mind and pulling back behind the vehicle you are passing.

8. If you are beyond the "point of decision" and it appears you are running out of room to complete the pass what should you do?

   Answer: "Stomp" accelerator and pull back into right lane quickly. Do not swerve further left.

9. What are some passing tips that help put the procedures and criteria into practice?

   Answer: (a) when oncoming car appears to be standing still, it is almost always far enough away for you to pass (b) when not sure, wait (c) impatience is biggest danger in passing (d) more difficult to accelerate at higher speeds (e) when in a string, wait your turn (f) make initial move smoothly and promptly (g) don't pass when driver in front is erratic, when vehicle being passed speeds up.

10. What should you do when being passed?

    Answer: Aid the passing driver as you would like to be aided when passing (e.g., move right some, slow up slightly), be on the alert for an escape route, be alert to what the passing driver decides to do if an emergency arises.

11. Review passing procedures and seek brief answers on the meanings of the various procedures.

March, 1979

EVALUATION E7a
(Page 1 of 3 pages)

Directions: Write the letters of the correct answers on the separate answer sheet.
A total of 15 points is needed to pass.

(All questions 1 point each)

1. After deciding that you want to pass a slow-moving vehicle ahead, your first action would be to:

   a). Scan the scene.
   b). Start increasing your speed.
   c). Start moving into the passing lane.
   d). Operate your turn signal flasher.

2. After you have passed a vehicle when should you leave the passing lane and return to the right lane?

   a). Immediately after you have passed the other vehicle.
   b). When you are about one vehicle length ahead of the other vehicle.
   c). When you can see the other vehicle in your rearview mirror.
   d). At any time when it is convenient.

3. When passing another vehicle you should NOT:

   a). Return to the right lane as soon as it is safe.
   b). Blow your horn to signal the other vehicle.
   c). Move into the passing lane, and then accelerate.
   d). Check behind you before changing lanes to pass.

4. It is legal to exceed the speed limit on a multiple-lane roadway when:

   a). The vehicle you are passing speeds up.
   b). Never.
   c). As long as you slow down to the speed limit or lower as soon as you have passed the other vehicle.
   d). None of the above times.

5. Which of the following BEST describes a driver using a proper search pattern?

   a). He looks "thru" the vehicle ahead, checks rear, and headchecks.
   b). He looks "thru" the vehicle ahead, checks both sides of the road, and headchecks.
   c). He looks ahead to both sides of the road, checks his mirrors, and headchecks.
   d). He looks to both sides of the road, watches for signs, checks rear, and headcheck

6. What is the greatest danger to a passing vehicle if there are objects ahead and to the other side of the vehicle he is passing?

   a). The vehicle being passed may swerve right.
   b). The vehicle being passed may accelerate.
   c). The vehicle being passed may swerve left.
   d). The vehicle being passed may suddenly slow down.

7. When predicting the time and distance you will need to safely pass another vehicle, you must determine:

   a). The speed of the vehicle you wish to pass.
   b). Whether your vehicle is performing well enough to pass.
   c). Whether you have enough clear visibility ahead to pass.
   d). All of the above.

8. Which is about the right speed advantage to have over a car you are passing on a two-lane roadway?

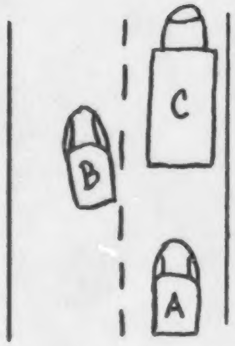
   a). 5 MPH.
   b). 5 to 10 MPH.
   c). 10 to 15 MPH.
   d). 15 to 20 MPH.

9. When faced with the task of aborting an attempted pass:

   a). Swerve left.
   b). "Stomp" the accelerator to the floor.
   c). "Hit" the brakes.
   d). Never swerve right.

10. Which of these lines means no passing?

   a). Broken yellow.
   b). Solid yellow.
   c). Broken white.
   d). Dashed black and white.



11. Vehicle B begins to pass truck C as both vehicles have topped a steep hill and start downward. Vehicle A should:

   a). Pass at the same time that Vehicle B passes.
   b). Follow closely behind Truck C until the passing lane is clear.
   c). Increase following distance so that he can see what is ahead and pass when clear.
   d). Not pass while going downhill.

12. When a passing driver is caught beside you with an oncoming vehicle that is too close, what is the right thing to do?

   a). Reduce your speed if he does.
   b). Hold a steady speed.
   c). Increase your speed if he does.
   d). Do the opposite of what he does.

13. When a driver is being passed:

   a). He should move to the left in his lane.
   b). He should aid the passing driver in every way possible.
   c). He should slow to at least 25 MPH below the speed limit.
   d). He should wave the passing driver around when it is safe to pass.

14. A "running start" means:

   a). To drop way back behind the vehicle to be passed, and then accelerate.
   b). Move into the left lane and "stomp" the accelerator to the floor.
   c). Wait until the vehicle you wish to pass slows down, and then "stomp" the accelerator to the floor.
   d). When clear to pass, increase your speed, then move into the left lane, and complete the pass.

EVALUATION E7a
(Page 3 of 3 pages)

15. Driving closely behind the vehicle you wish to pass:

    a). Increases your area of vision.
    b). Could involve you in a rear end collision.
    c). Places you at the point of decision.
    d). All of the above.

16. The "point of decision" in a passing maneuver is:

    a). That point in the passing maneuver where you decide to complete the pass.
    b). That point in the passing maneuver where you are in the other driver's blind spot.
    c). That point in the passing maneuver where you can see both front and rear.
    d). That point in the passing maneuver where you choose your escape route.

17. A driver should proceed to the "point of decision":

    a). Slowly.
    b). After being waved around by the driver being passed.
    c). As though he were going to complete his pass.
    d). Only if there are no oncoming vehicles for one mile.

18. In most instances it is safe to consider passing when a distant oncoming vehicle appears to be:

    a). Standing still.
    b). Moving slowly.
    c). Moving toward you.
    d). Quite small.

19. When you are traveling in a "string" of vehicles it is advisable to "wait your turn" because:

    a). You will expose yourself to danger for a long time.
    b). It is illegal.
    c). The other drivers in the "string" will not let you back in.
    d). The driver leading the "string" will probably speed up.

20. If you have already passed the point of decision in an attempted pass, and a car appears from a dip in the road a short distance ahead, then you should:

    a). Brake hard, and fall back in behind the vehicle being passed.
    b). Steer hard left.
    c). "Stomp" the accelerator to the floor, pass the vehicle, and move into the right lane.
    d). Move immediately right, allowing the oncoming vehicle to pass by.

May, 1979

MODULE 8: CRITICAL TASKS, VEHICLE MALFUNCTIONS AND BREAKDOWNS, AVOIDING OR MINIMIZING IMPACT (Page 1 of 2 pages)

OBJECTIVE WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS ON VEHICLE MALFUNCTIONS AND BREAKDOWNS AND AVOIDING OR MINIMIZING IMPACT, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

IN THE T.S.E. CAR THE STUDENT, UNDER SIMULATED EMERGENCY CONDITIONS, WILL DEMONSTRATE CORRECT PROCEDURES FOR HANDING VEHICLE MALFUNCTIONS AND BREAKDOWNS AND FOR AVOIDING OBJECTS IN THE VEHICLE'S PATH AND MAINTAINING CONTROL WHEN FACED WITH MAKING MANEUVERS QUICKLY IN LIMITED TIME AND SPACE.

CONCEPTS

Loss of vehicle control functions: accelerator pedal sticks, brakes fail, engine stalls, engine overheats, steering fails, tire blows out or goes flat.
Loss of visual input: headlight failure, hood flies up.
Fire
Roadside Breakdowns: warning other vehicles, correcting minor problems, obtaining assistance, pushing and towing.
Controlled braking and steering, evasive action and factors influencing these actions, off-road recovery.
Automotive engineering, highway engineering, "booby traps."
Force of impact, angle of impact.

STUDENT LEARNING ACTIVITIES

1. Independently read textbook "________________," pp.__________.
2. In a classroom group setting, view "Belt and Bod" (FS,C), and "Safety Belts -- Fact or Fiction" (Slide, Tape Program).
3. Independently read the booklet "The Safety Belt Message," and answer the questions posed in the booklet on Worksheet W8a.
4. Independently read Informational Flyer IF8a.
5. Participate in a teacher-led discussion on safety belts and passive restraint systems.
6. In small groups of 5-7, participate in changing a tire using the procedures outlined on Informational Flyer IF8b.
7. In a classroom group setting, participate in a teacher-led discussion on vehicle malfunctions and breakdowns.
8. In a classroom group setting, participate in a teacher-led discussion using overhead Transparency Set T8a regarding actions to take in emergency situations caused by a vehicle malfunction or breakdown.
9. Independently complete Worksheet W8b.
10. Independently read Informational Flyer IF8c and complete the Worksheet W8c.
11. In small groups of 3 or 4 study and recite to each other procedures for coping with vehicle malfunctions and breakdowns and taking evasive actions when an accident seems imminent.
12. In a classroom group setting, view "Minimizing Impact," (FS,C).
13. Independently complete Worksheets W8d and W8e.
14. In a classroom group setting, participate in a teacher-led discussion on avoiding or minimizing impact.
15. In the T.S.E. car practice procedures for coping with vehicle malfunctions and breakdowns and evasive actions in simulated situations.

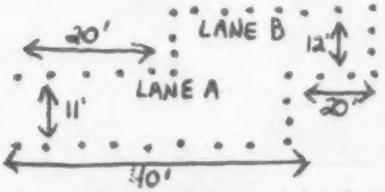
MODULE 8: CRITICAL TASKS, VEHICLE MALFUNCTIONS AND BREAKDOWNS, AVOIDING OR MINIMIZING IMPACT

May, 1979

(Page 2 of 2 pages)

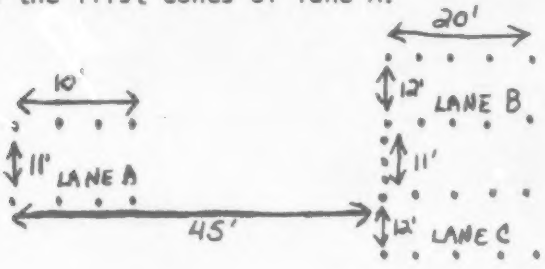
EVALUATION

1. Complete Evaluation E8.
2. In the T.S.E. car, demonstrate correct procedures in one out of two times for each of the following:
   - a). Loss of forward vision, (daylight, hood fly up or windshield covered with blanket of mud or water)--simulated by teacher holding object in front of student driver.
   - b). Loss of vision, night (lights go out)--simulated by teacher holding object in front of the student driver and giving verbal warning at the same time that it is night.
   - c). Loss of power steering and power brakes (if vehicle has power steering and/or power brakes), engine stall--simulated by teacher turning key off.
   - d). Accelerator sticks--simulated by teacher reaching over with left foot and pushing accelerator to the floor.
   - e). Loss of brakes--simulated by putting object under brake pedal.
   - f). Controlled braking and steering--students drive into lane A of formation as shown at 20 MPH with foot on the accelerator and stop the vehicle parallel in lane B before the barrier at the end of lane B, without skidding any tires or hitting any cones or boxes. Braking can commence only after the front of the car passes the first cones of lane A.



Cones or cardboard boxes can be used to outline t[illegible] lanes.

   - g). Evasive action--without hitting any cones or boxes, the student will "excape" without brake to the left in lane B or right in lane C on verbal comand of "left" or "right" from the teacher. The student should enter lane A at 25 MPH with foot on accelerator. The teacher should give the command when the front of car reaches the first cones of lane A.



May, 1979

WORKSHEET W8a

(Page 1 of 2 pages)

NAME ______________________________

DATE ______________________________

Page 6 1. Do you usually wear a safety belt at all times when you ride or drive? (Safety belts include both lap belts and lap-shoulder belts.)

_____Yes _____No

2. If you answered "no," list your reasons below:

____

____

____

3. Do your parents, brothers and sisters use safety belts?

_____Yes _____No

Page 7 1. In which age group would you expect to find the highest death rate per year due to motor vehicle accidents?

a._____15 to 24

b._____25 to 44

c._____45 to 64

Page 9 2. How about the speeds at which people drive? Forty miles per hour seems to be a fairly reasonable speed at which to travel. What percentage of accidents do you suppose occurs at speeds under 40 miles per hour?

a._____20 per cent or slightly over

b._____50 per cent or slightly over

c._____80 per cent or slightly over

Page 11 3. Recent studies show that safety belts are about 60 per cent effective. This means that vehicle occupants wearing safety belts are 60 per cent less likely to suffer serious or fatal injuries in accidents than are unbelted occupants. Why do you think safety belts are effective?

a._____They prevent your head, chest and upper abdomen from hitting the windshield, steering wheel or other parts of the car interior in a collision.

b._____Even if you are not involved in a collision, safety belts ensure that you will have more control of the car.

Page 13 4. You've probably heard a number of arguments against safety belts. What about this one? "I'd rather be thrown clear of the car than be trapped in it in case of fire or submersion." What do you think?

a._____It's safer to be thrown clear of the car.

b._____It's not safer to be thrown clear of the car.

May, 1979

WORKSHEET W8a
(Page 2 of 2 pages)

Page 15 5. Here's another argument people sometimes use against safety belts--"Safety belts are uncomfortable. Some people say they can even hurt you!" Which statement is closer to what you think?

a. _____ I think safety belts are uncomfortable and could possibly hurt you.

b. _____ Even if they are a little uncomfortable, wearing safety belts is worth it.

Page 23 Match the pictures below with the descriptions.

1. Infants ____________
2. Small children ______________

Page 25 The following are bad habits when driving with children. After each bad habit, write a brief reason why these habits are dangerous.

1. A parent who is a passenger holding an infant in his/her arms in the front seat. ______________________________
____
____

2. Children kneeling or standing on the car seat. ______________________________
____
____

3. A child sleeping on the rear window ledge. ______________________________
____
____

Page 27 1. Did this program change any of your feelings about using safety belts?

_____ Yes _____ No

Why or why not? ______________________________
____
____

2. Are there any objections you have about safety belts that were not answered by this program?

_____ Yes _____ No

If you answered "yes," list your objections. ______________________________
____
____

3. Do you think you can now--and will--influence other people (such as your family and friends) to use safety belts?

_____ Yes _____ No

Comments ______________________________
____
____

INFORMATIONAL FLYER IF8a
(Page 1 of 9 pages)

May, 1979

WHY IS ALLSTATE INTERESTED IN AIR BAGS?

Allstate historically has supported new ideas that have offered the promise of significant saving of lives and reduction of injuries and property damage from traffic crashes. These ideas have included high school driver education, drunk driver controls, and crashworthy vehicle bumpers. We are convinced that air bags have vast potential in this respect.

In addition to our civic interest, we are concerned because we are the custodians of millions of dollars of our policyholders' premiums for Auto, Accident, and Life insurance. As custodians we are intimately involved in the disbursement of these funds to pay ever-increasing costs of deaths and injuries in traffic crashes. The benefits from the expected reduction of crash injuries and deaths through air bags will help hold down the size of these premiums.

ARE AIR BAGS RELIABLE?

Air bag system components have proved totally reliable in field testing accomplished thus far. For example, Ford Motor Company is field testing 831 Mercury cars equipped with air bags. As of March 31, 1973, the cars had been driven 14.5 million miles without a single failure of the system or any of its components. This included no accidental activations and showed consistently successful operation under appropriate crash conditions.

General Motors has amassed a similar body of experience from tests at its proving grounds. NHTSA Docket Number EX 72-2, Notice Number 2, contains General Motors' testing results which have been filed with the Department of Transportation. It reports satisfactory performance with the front, angular and side impact tests. It also reports satisfactory test results for standing children, out of position occupants, and a crash into a pole at 30 miles-per-hour. These examples demonstrate "that the level of safety exceeds the level of safety provided by the lap and shoulder restraints required by Standard Number 208."[1]

GM has built 1,000 air-bag-equipped Chevrolet autos for field testing in 1973 and has stated publicly that it will build 100,000 cars equipped optionally with totally passive front-seat air bag systems on certain 1974 models. Complete reliability can be established only through continued road testing of air bags. The Department of Transportation and Allstate will continue this testing in cooperation with the auto manufacturers to further substantiate air bag reliability.

DO AIR BAGS ACTUALLY PREVENT INJURY IN A CRASH?

Several series of tests, conducted by organizations such as Wayne State University, the United States Air Force, the Department of Transportation and others have provided clear evidence that the air bag is able to reduce or prevent passenger and driver injury in frontal impacts better than any other device or system known today.

These operational tests were conducted using baboons, lifelike anthropomorphic dummies, cadavers and live human volunteers. In several instances, comparative tests were run alternately using belt systems (lap and shoulder) and air bags. In all instances, the cushions provided more effective restraint in frontal crashes, the most serious type of collision, than the other devices tested.

---

[1] Federal Register, Vol. 38, No. 7, Thursday, January 7, 1973.

CAN I GET AIR BAGS INSTALLED IN MY PRESENT CAR?

Several auto accessory manufacturers have indicated interest in developing after-market or so called "retrofit" cushion systems which can be installed in cars now on the road. Allstate does not endorse the retrofit application or concept at this time, however, because vehicle structure and crash characteristics of each make and model of auto must be "tuned" or individualized into the air bag sensor unit.

WOULDN'T IT BE BETTER TO GO AFTER THE DRUNK DRIVER, SINCE ALCOHOL IS INVOLVED IN MORE THAN HALF OF ALL FATAL CRASHES?

Through multimillion-dollar corporate advertising and public support programs, Allstate has strongly advocated vigorous drunk driver curbs. The company also has worked directly in many areas to get comprehensive identification, referral and clinical treatment programs established and implemented for problem drivers, as prescribed by the Alcohol Countermeasures Program of the National Highway Traffic Safety Administration.

WHY DOESN'T ALLSTATE EMPHASIZE EXISTING SAFETY PROGRAMS, SUCH AS DRIVER EDUCATION?

Allstate has been a strong advocate of effective high school driver education for many years. The company has been instrumental in promoting the simulation technique of teaching driving in high schools and is a major supplier of driver education films and programs to high schools and colleges.

Even though we are convinced of the value of effective driver education, the impact on traffic statistics is limited to young people who are able to receive this instruction as a part of their overall education.

Air bags will benefit all age groups immediately.

WHY CONCENTRATE ON THE CAR WHEN IT IS THE DRIVER WHO IS RESPONSIBLE FOR ALMOST ALL CRASHES?

Although driver error and/or inexperience accounts for the vast majority of crashes, the effective retraining of more than 100 million drivers is not immediately feasible.

Although many programs do exist to upgrade the level of driving competence, the only practical means of reducing traffic deaths and injuries soon is to make crashes more survivable while the many other longer range programs are being implemented.

Also, every driver is not always responsible for his crash. "Clunkers"--grossly unsafe cars--contribute to many crashes. Faulty designed roadways also cause many fatalities. Therefore, the air bag becomes even more important when one considers the loss of life and income to innocent victims and their families.

WILL AN AIR BAG DEPLOY IF A CAR IS HIT WHILE PARKED?

The air bag system remains operable for a few seconds after the ignition is turned off. If a car is hit in the front end during this period by another vehicle, with a 16 mph-or-more impact, the cushions will deploy. If hit after this period, they will not deploy, and are dormant until the ignition switch is turned on again.

The sensor is triggered by either a change in the velocity of the car in a crash, or by a similar impact from a very heavy weight moving at great speed while the car is parked during those few "active" seconds.

For example, to deploy the air bag in a parked car whose sensor is still operable would require an impact the equivalent of a 4,000-pound concrete block moving at a speed of 8 to 10 miles-per-hour. A person striking the front bumper with a baseball bat, or similar hand-held object, could not deploy the air bag.

Deployment is accomplished by an electrical storage capacitor built into all air bag systems. This capacitor assures that the air cushion has sufficient electrical current to activate the system even if the battery is destroyed in the crash.

IF AN AIR BAG SHOULD HAPPEN TO DEPLOY INADVERTENTLY, WILL A DRIVER LOSE CONTROL OF HIS CAR?

According to extensive testing, the chance of inadvertent deployment of a cushion is extremely remote. However, the half-second maximum inflated interval should not prevent the driver from retaining control of his vehicle, even at highway speeds.

Department of Transportation computations show that the chance of inadvertent deployment of present air bags is about one in 3.3 billion vehicle miles traveled. A motorist driving an average 10,000 miles yearly from age 16 to 70 would roll up 540,000 miles. Thus, it would take more than 6,000 such driving lifetimes for one inadvertent deployment to occur, or, put another way, every 6,000th driver might expect one such inadvertent deployment during his 54 driving years. This is why we call the chance "extremely remote."

WHAT ABOUT REPLACING AN AIR BAG AFTER IT DEPLOYS IN A CRASH?

If the car itself is repairable after a crash, air cushion systems can be replaced at nominal cost--probably less than that of a new bumper.

Replacement of an air cushion is similar to the replacement of a collapsible steering column. The air cushion, like the column, works once to do its job. Repair by unskilled persons is neither practical nor safe. The system will be replaced as a module, similar to a TV picture tube replacement.

HOW MUCH WILL TEMPERATURE VARIANCES AFFECT AIR BAGS?

The air bag system can withstand temperatures varying from -40 F. to +200 F. without sustaining any damage to its components. The system is fully operable from -20 F. to +180 F. which covers most of the temperature ranges found in the United States. This temperature range exceeds most other operating temperature considerations in automobile design.

WILL AIR CUSHION SYSTEMS MAKE CARS TOO EXPENSIVE FOR MANY PEOPLE?

Major manufacturers of cushion systems estimate that mass production of the device will result in costs comparable to or even lower than the alternative advanced seat belt systems to come. The least favorable projections of cushion system costs approximate the cost per auto of popular AM/FM/Stereo combination radio and tape deck players being purchased by many car owners today.

The proposed seat belt systems of the near-future, when and as mandated, must (to be nearly as effective as air cushions) include nondefeatable components including ignition interlocks, door open/close interlocks, occupied-seat sensors, shoulder belts, inertia reels, automatic-adjusting lap belts, warning lights and buzzers for unfastened belts, logic circuitry to assure proper sequential usage by occupants, a means of distinction of human occupants from heavy pets (dogs) and freight (boxes and groceries) and a system to prevent small children from occupying certain seats where belts could cause them serious injury.

On April 20, 1973, the National Highway Traffic Safety Administration rejected a request by several auto manufacturers to amend or revoke the lap-and-shoulder-belt ignition interlock provision of Standard 208. This 1974 system is similar to the proposed seat belt system described above.

The auto industry had claimed the 1974 designs would produce a high degree of failures in their first year of operation. The government rejected the industry's claim by stating, "The reliability of any system is a function of the manufacturer's own design and quality control."[1] Allstate feels that when reliability and quality control costs of the interlock system provide protection comparable to air bags, the cost of both air bags and interlock systems will be about equal.

WHY DOES ALLSTATE SUPPORT AIR CUSHIONS WHEN THEY ARE LARGELY INEFFECTIVE IN ROLL-O[illegible]S, REAR-ENDERS AND SIDE CRASHES?

More than 60 percent of all auto crashes, and more than 70 percent of fatal crashes, involve frontal impact by at least one vehicle. Any significant improvement in the survivability of frontal crashes thus would have a dramatic effect on the overall fatality tolls.

Allstate advocates the use of forced-action or passive lap belts in conjunction with air bags for added frontal crash occupant restraint, for protection in low-speed crashes where air bag systems are designed not to deploy and for side impacts, rear-enders and roll-overs. The air bag with the lap restraint offers the best protection feasible now and within the foreseeable future.

For side impact protection, stronger door panels and energy absorbing materials are needed. This will prevent penetration by the impacting car and protect the occupants against impact with the inside of the body compartment.

Roll-over protection can be accomplished with stronger roof design and perhaps the use of passive lap belts or improved seat design to better retain the occupant. The stronger the roof, the greater the chance of occupant survival in a roll-over.

In rear-end collisions, the seat back and head restraint today function in a way similar to the air bag in absorbing the energy of an impact. Early research is under way in the area of passive head restraints that will deploy air bags in high speed rear impacts. These smaller air cushions would be installed in the seat back. It is hoped the use of seat back air bags will aid in "see through" visibility by allowing lower seat backs and providing needed protection by inflating only in severe rear-end collisions.

---

[1] Federal Register, Vol. 38, No. 76, Friday, April 20, 1973.

WILL AIR BAGS DETERIORATE WITH AGE SO THAT THEY MIGHT NOT WORK AFTER SEVERAL YEARS?

Present estimates by the Department of Transportation and air cushion manufacturers are that the system components will have an operable life in excess of that of the vehicles in which they will be installed. In addition, cushion systems are required to have a self-testing device that actuates a warning light if any part of the system is not in working order to warn against deterioration or other potential malfunction.

Accelerating years of deterioration by laboratory testing is difficult. Materials similar to those used by the military are used for air bags. This basic military data on fabric, metals and components has assisted in establishing strict quality control standards for long-life characteristics for crash cushion components. In addition, air bag suppliers have been testing systems that have been stored for years under severe temperature changes, humidity, mold exposure, etc., with consistent success.

WHAT ABOUT OTHER SYSTEMS BEING DEVELOPED AS ALTERNATIVES TO AIR BAGS?

Experimental systems such as blankets that deploy in front of occupants, nets that drop from the roof and automatic belt systems have been developed by various manufacturers. In each case, these systems have not offered the total body restraint afforded by air bags. A frequent omission is the lack of restraint for the head and upper torso of the occupant which the air cushion provides.

The air bag is the best system available today. If a better one is developed, Allstate will support it.

WHY DOES ALLSTATE FAVOR BOTH AIR BAGS AND LAP BELTS?

The air bag and lap belt in combination offer the greatest degree of protection in all types of crashes. Because lap belts and cushions each provide protection not offered by the other, Allstate advocates the use of the lap belt with air bags.

The lap belts we advocate are either totally passive--installing themselves around occupants automatically, without occupant action--or "forced action" belts with warning lights, buzzers and ignition interlocks. We hope such lap belts soon will be used in concert with air bags.

There are additional advantages of lap belts and cushions in combination. Lap belts keep the driver in position to maintain better control of his car in sudden or sharp evasive maneuvers and, should an impact occur, keep him positioned in the best possible location for the restraining function of the air bag. The lap belt also will function in the event of roll-over crashes, to keep the driver and other occupants in the car where they are many times safer than if ejected.

IF A PERSON DOESN'T WANT AIR BAGS, WHY SHOULD HE BE FORCED TO PAY FOR THEM?

Under the National Traffic and Motor Vehicle Safety Act of 1966, the National Highway Traffic Safety Administration is granted the authority to set safety performance standards for vehicles purchased in the United States. Standard 208, requiring passive restraint systems, was issued under this authority and establishes system performance requirements for which the air bag is currently the most practical device capable of compliance.

In light of more than 56,000 traffic deaths and 5,000,000 injuries annually, the federal government feels that the need to cut this toll considerably outweighs the retention of buyer options for purchasing these devices. Allstate agrees.

WHAT EFFECT WILL THE RECENT DISTRICT COURT DECISION HAVE ON PASSIVE RESTRAINTS?

A U.S. Court of Appeals decision of December 5, 1972, upheld by a 2-to-1 vote most of the positions taken by the National Highway Traffic Safety Administration The ruling was the outcome of court action taken by three of the major U.S. automakers (excepting General Motors) and the Automobile Importers Association who had challenged the authority of the NHTSA to adopt a passive restraint standard.

The court declared that:

1. The NHTSA can adopt safety standards that require improvements in existing technology, or the development for new technology.
2. The air bag standard is "practical" as required by law, and the Allstate test fleet is an example of the confidence expressed by many in the reliability and effectiveness of the present air bag system.
3. The automakers' contention that seat belts are better than air bags was unproved; neither device was clearly superior in all situations and the court upheld NHTSA's discretionary power to decide in favor of air bags.

The one point upon which the court agreed with auto manufacturers was the use of a specific anthropomorphic crash dummy for the purpose of testing for compliance with the standard. The specifications for this test device, the court stated, must be more objectively defined so that comparable test results can be achieved by competing manufacturers of cars when making compliance tests. It is only on this point that a delay in the standard might develop.

ARE AIR BAG TESTS CONTINUING?

Yes. In late December of 1972, Eaton Corporation crashed two more air bag-equipped cars into a concrete barrier. The cars and their human occupants, a male driver and a female passenger, hit the barrier twice, once at 24.5 miles-per-hour and again at 24 miles-per-hour. The air bags deployed perfectly in both tests and the only injury was a minor pelvic bruise suffered by the woman passenger from the lap belt.

Both autos received extensive damage. In each crash, the front end was almost "totaled", the front hood jacknifed out of shape and the doors had to be pried open.

Neither occupant complained of the noise generated by the inflating air bag, even though the windows were closed. Physical examinations showed no hearing impairment and both passengers reported the noise of the deploying air bags blended in with the noise of the crash.

When asked what the deploying air bag felt like, the woman occupant commented, "It was like being hit by a big marshmallow. I have been slapped harder than that."

HAVE THERE BEEN ANY MORE REAL-WORLD CRASHES SINCE THE SANTA BARBARA CRASH?

The second real-world crash dramatized the lifesaving capabilities of the air-bag-system passive restraint. A Government Services Administration car, equipped with an air bag, was involved in a crash in the Los Angeles area on February 7, 1973. In this collision, an occupant of the car riding in the right front passenger side was cushioned by the air bag after the 1972 Mercury in which he was riding collided with a 1970 MG which had spun around on a freeway access road. The occupant, an employe of the Atomic Energy Commission, was uninjured in the 20 mile-per-hour crash.

Not only was he uninjured; his eyeglasses, which stayed in place as he pitched into the bag, were undamaged.

By far the most dramatic evidence of air-bag reliability was offered by an Illinois man who said, "There's no doubt the air bag saved my life." On February 20, 1973, his car collided with a parked Illinois State Police car at a speed radar recorded at 68 miles-per-hour. The Eaton Corporation employe was driving a Mercury equipped by Eaton with an air bag in the steering wheel hub.

Like many drivers, the Eaton employe had not fastened his seat belt equipment before the crash. In the absence of an active restraint, the passive steering wheel air bag cushioned him, saving his life, and keeping his injuries to a broken wrist, suffered when his hand impacted with the windshield, and some cuts and abrasions on his right leg and knee. The driver said he blacked out before the crash; when he recovered, the bag had already deployed and cushioned him.

The crash marked the first instance in which the air bag system was called upon to do its work in a very high-speed crash with an unbelted occupant. Again the air bag demonstrated its capabilities for saving lives and reducing serious injury.

WHY WERE SOME OF THE EARLIER AIR BAG TESTS UNSUCCESSFUL?

All tests involving production-type air cushion systems or components have been consistently successful. This is true of tests by cushion manufacturers, auto manufacturers and governmental agencies.

Tests conducted for Allstate by Dynamic Science Laboratories using air-bag-equipped Mercurys from our fleet were totally successful with the devices operating only within the design parameters.

The few early test failures that have received extensive publicity involved handmade systems, essentially one-of-a-kind laboratory research devices, which bear little relationship to proposed mass-production models.

The highly publicized test failures of the Fairchild-Hiller Experimental Safety Vehicle and air cushion sled at Wayne State University in early 1972 actually involved research-oriented devices that were totally different from the air bags planned for 1976 model cars. Even these devices, however, did work properly after minute corrections--the proper connection of a manually installed electrical lead in both cases--were made.

WHAT HAPPENS IF THE AIR BAG INFLATES WHILE A CHILD IS STANDING ON THE FRONT SEAT?

A small child never should be allowed to stand on the front seat or floor of a moving vehicle. However, if a child should be standing on the front seat, tests using dummies have shown that new dual pressure level air bags will first partial inflate and force the child against the seat before full cushion deployment.

A recent GM paper given at the International Passive Restraint Conference in Detroit states that rebound and standing child problems are largely solved.

Also, Ford, it appears, intends to use either a forced action system (belts with warning lights, buzzers and ignition interlocks) or passive lap belts with air bags, further reducing the standing child problem.

WILL AN INFLATING AIR BAG DAMAGE HEARING?

Early test deployments of crash cushions in closed autos with live volunteers produced no hearing deterioration. Ninety-one male and female volunteers participated in these tests at Wright-Patterson Aeromedical Center.

Allstate has conducted three scientific hearing examinations connected with air bag deployments in our Mercurys. These tests were conducted on our advertising representative Ed Reimers and our crash test vehicle occupant Hal Needham, both during our Phoenix tests, and on our fleet car driver who had a "real-world" crash in California. In none of the three cases did the hearing examinations reveal any hearing change, damage or discomfort.

Both our Phoenix crash test occupant and our California claim adjuster told crash investigators that they did not hear their air bag deployments over the sounds of the crashes themselves. Our California driver stated further that during the excitement and preoccupation of his crash, he was not even aware that his air bag had deployed.

In February of 1973 two more air bag cars crashed with air bag deployment. A Government Services Administration auto collided with an MG at about 20 miles-per-hour on February 7. On February 20, an Eaton auto crashed into a parked police car at 68 miles-per-hour.

No hearing impairment was suffered by either the Government Services Administration passenger or the Eaton driver when the air bag deployed. Nor did either occupant incur any hearing discomfort.

WILL AN INFLATING AIR BAG DAMAGE THE AUTO INTERIOR?

In tests conducted by Allstate and others, preproduction model cushions have been inflated in closed cars with no structural damage to the vehicle interior except to the breakaway dash panel covering the cushion.

Damage to instrument panels in earlier tests has been the result of lack of design knowledge for inflation characteristics. Newer systems do little damage to car interiors in relation to the total car repair cost--even in low speed crashes.

DOES ALLSTATE SUPPORT A DEVICE THAT IS LARGELY UNTESTED?

Air bags and their various components have been tested extensively. During the last few years, tests have been conducted successfully in environments simulating nearly all possible real-world conditions.

Several fleet operators including auto manufacturers and Allstate have been operating cars on the road with air cushion systems installed and ready for use. Tests have been conducted at Holloman Air Force Base, using live volunteers, baboons and anthropomorphic dummies. The University of Michigan Highway Safety Research Institute has tested with dummies. Wayne State University has tested with animals and dummies. General Motors and Ford have tested dummies in cars and high-G sleds. The DOT and the Bureau of Standards laboratories have tested with animals and dummies. Several current and prospective air bag manufacturers--including Eaton Corporation, Allied Chemical, Olin Industries--have tested with dummies.

Allstate in 1972 operated 200 Mercury Montereys equipped with right-front-seat air cushions, and expects to add more 1973-model cars with both driver and front passenger cushions. The 200 Mercurys alone have amassed about 4,250,000 miles in their first year of use. Two of the Mercurys were impacted into SAE J850 barriers in Phoenix last year, at 5 and 17½ miles-per-hour respectively with a live occupant in the cushion-protected seat. In the 5 mph crash the cushion did not deploy, as it was not supposed to. At 17½ mph, it did deploy as it was supposed to, and the occupant emerged unscratched. . .and a 17½ mph barrier crash is equivalent to a 35-mile crash into a parked car. A third Mercury was subjected to high speed rough-road driving, a panic-braking stop from 50 miles-per-hour, and a 45-mph ramp jump of about 50 feet which virtually wrecked the car--but in no case did the air bag deploy inadvertently. These are mass-produced autos built in Ford's St. Louis Mercury assembly plant.

Forty-six of the 200 Allstate Mercury cars have been involved in real-world collisions of virtually all types in their normal fleet use. In no case should the cushions have deployed. . .and none did.

The first actual traffic crash, with air bag inflation, took place on October 9, 1972, in Santa Barbara, California. A fleet car driven by an Allstate claims adjuster collided with a garbage truck as our driver was making a left turn. Both drivers incurred minor injuries and damage to the fleet car exceeded $2,000.

Although the Allstate Fleet Mercurys are equipped with the air cushion on the front passenger side only, Ford Motor Company investigators have concluded that this first real-life test of the air bag was a success. It deployed perfectly upon the auto's impact with the truck, as it should have. Jack Pflug, Ford's chief engineer for body design and development, said, "Everything went as expected. The bag went off just right. Everything happened the way it was predicted. The crash sensor was checked afterward and it is right on the money."

(Reprinting of part of the booklet "Automotive Air Bags, Questions and Answers," Edition No. 3, May, 1973)

June, 1979

TEACHER-LED DISCUSSION
(Student Learning Activity 5, Module 8)
(One Page Only)

Since the wearing of safety belts is a decision that is affected by the attitude of the driver (and/or passenger), the following questions tend to deal with the affective rather than the cognitive aspects of safety belts. Therefore, there are no suggested answers. You are encouraged to use the questioning methods suggested for trigger films to keep discussion moving.

1. "Safe drivers wear safety belts." Is that statement a contradiction since safe drivers really don't need to wear safety belts?

2. Why do you or don't you, or will you or won't you, wear safety belts?

3. For those of you who won't wear safety belts, if the reasons you give for not wearing seat belts are among those the filmstrips or brochures identified as myths, what makes you disbelieve that the reasons are not valid?

4. The booklets you see encouraging the use of safety belts say they are "easy to use!" What do you think about that?

5. Some states are beginning to adopt laws requiring that children must be in safety restraints when riding in a vehicle. Do you think it would be a good idea for all states to do that?

6. Since the facts show that many people do not use safety belts, should we take the direction of having all cars sold being equipped with some sort of passive restraint system?

7. Should we adopt laws requiring safety belt usage for all, not just children?

8. What do you think you could and/or should do to influence your families and friends to wear safety belts? Will you do it? Why or why not?--to influence others? Will you do it? Why or why not?

June, 1979

INFORMATIONAL FLYER IF8b
(One Page Only)

CHANGING A TIRE

1. Check that automatic shift car is in park or standard transmission car is in low or reverse.
2. Set parking brake firmly.
3. Block both wheels at both front and back of tires at the opposite end of the car from which the tire is to be changed with boards or bricks.
4. Remove all tire-changing equipment and spare tire from trunk or storage area.
5. Pry off hub cap with jack handle or screwdriver.
6. Loosen the lug nuts or bolts slightly with socket wrence or tire-changing (lug) wrench.
7. Use the jack to raise wheel off ground. (Check the car manual for specific jacking instructions). Make certain the jack is straight. Jack slowly as wheel begins to lift off the ground. Jack just enough that tire clear ground. Check the stability of the car once the wheel is off the ground by gently rocking forward and back and side to side. IF CAR IS NOT STABLE, DO NOT REMOVE THE TIRE, BUT LET THE CAR DOWN AND JACK IT UP AGAIN UNTIL IT IS STABLE.
8. Remove the lug nuts or bolts and pull off the wheel. BE CAREFUL NOT TO GET YOUR HANDS IN A POSITION BETWEEN THE GROUND AND THE TIRE OR THE TIRE AND THE FENDER WHERE THEY COULD BE CAUGHT WHILE REMOVING OR REPLACING THE TIRE AND LUGS, SHOULD BY SOME REMOTE CHANCE THE CAR SHOULD FALL. ALWAYS KEEP YOURSELF IN A POSITION TO BE ABLE TO GET AWAY QUICKLY SHOULD THE CAR START TO FALL.
9. Put on the spare tire and replace the lug nuts or bolts and tighten each at least four or five turns by hand.
10. Tighten two of the lug nuts or bolts firmly with the wrench on the opposite sides of the wheel.
11. Lower the jack until the tire is in contact with the ground and tighten firmly all the lug nuts or bolts with the wrench. Once you think they are all tight, make one final check of each lug nut or bolt.
12. Replace the hub cap and lower the car the rest of the way.
13. Store the tire-changing equipment in the trunk or storage area and remove the blocks from the wheels.

June, 1979

TEACHER-LED DISCUSSION
(Student Learning Activity 7, Module 8)
(One Page Only)

Vehicle Malfunctions and Breakdowns. The questions below should be asked of the students after reviewing the procedures for that particular malfunction or breakdown. Other answers than the "possible answers" given here may come out--but be sure that the concepts contained in the "possible answers" come out at some time or another in the discussion.

1. Review procedures to be used when the accelerator sticks.
   - Why should a driver not try to unstick an accelerator by reaching down with a hand to pull it up?

   Possible Answer: Car would almost surely wander from path so that danger from hitting another car or roadside object would be likely. And the car would be gaining speed quickly since it would be impossible to be stepping on the brake and reaching for the accelerator pedal at the same time.

   - Why should you turn off the ignition before shifting to neutral?

   Possible Answer: Serious damage to the engine could result because it would race.

2. Review procedures to be used when brakes fail.
   - Why is it necessary to hold out on the park brake release if you use the park brake to stop the car when the regular brakes fail?

   Possible Answer: Because not doing so could cause the rear brakes to lock up and could then cause the car to go into an uncontrollable skid.

3. When the engine stalls in a car that has power steering and/or power brakes, what happens to the steering and braking and what should you do to combat it?

   Possible Answer: Both become "hard." A driver should recognize that that will happen and prepare to use as much strength as possible when attempting a turn to get out of the traffic flow and to not put oneself in a position of having to stop the car in a normal or shorter distance when the car is still free-wheeling or at least until the driver is able to have the brakes engaged and know they can overcome the "hard" brake enough to stop the car in a normal distance.

   - Why should you shift an automatic shift car into neutral to restart an engine when you are travelling along?

   Possible Answer: Shifting the car into park, where the car is usually started, would require bringing the car to a complete stop, possibly holding up other traffic. Stopping is not necessary as long as the driver can control the car on the roadway and start the engine at the same time.

4. Review procedures to be used if a tire blows out or goes flat rapidly. Why is it important not to brake hard when a tire blows out or goes flat quickly?

   Possible Answer: Because the contact and friction between the inflated tires and the road is so different that a skid could be induced by hard braking.

   - What will the car feel like if a tire blows out or goes flat quickly?

   Possible Answer: It will seem as though the car is on a bumpy road and the car will seem to want to pull off first one direction, and then another and so on, and sometimes will act like it is going into a skid, (especially when it is a back tire that blows out or goes flat quickly.)

June, 1979

OVERHEAD TRANSPARENCY SET (T8a)
(Page 1 of 4 pages)

Emergencies caused by vehicle malfunctions or breakdowns.

1. Transparency #1, Situation B4-3.

   a). What are the possible dangers? Who is threatened by each of the dangers?
   b). What are the actions that should be taken by the driver of the stalled vehicle? How would these actions be different if a train were in sight than if no train were in sight on the tracks?

   Possible Answers: a). If the driver remains in the car to try to start it and there is some difficulty in getting it started, it increases the chances of being struck by a train if one is in sight. The driver and any passengers would be threatened. If the car is left on the tracks while the driver goes for help, it could be struck by a train which comes along in the meantime. Personnel and/or passengers on the train are threatened. If anyone tries to push the car off the tracks when a train is in sight, he/she is threatened. b). If no train is in sight, the driver should try to start the car and drive it off the track. If it doesn't start right away, the driver should push it off the track before trying further to start it by working under the hood, etc. If the driver is not able to push the car off the tracks, he/she should get help as soon as possible to get the car off the tracks. If a train is in sight, the driver or passengers should immediately leave the car and move out of the area so as not to be struck by flying parts should the train hit the car.

2. Transparency #2, Situation C5-1.

   a). What errors have been made in connection with Car C?
   b). If you were the driver of Car C, what would you do differently?
   c). If this were a roadway where there was no shoulder to pull off, what should you do?

   Possible Answers: a). The driver has not pulled completely off the roadway. The person changing the tire is remaining by the car as other cars are approaching. b). Get the car clearly off the road. As the tire is being changed, and other traffic approaches, stop changing the tire and move to the outside edge of the shoulder until the traffic passes. If the traffic is continuous it might be advisable to wait to change the tire until such time as the traffic clears or drive completely off the shoulder to change the tire if there is a place level enough off the shoulder to change the tire. c). Drive slowly, at the expense of perhaps ruining a tire and/or rim until a place wide enough to get off the road can be found.

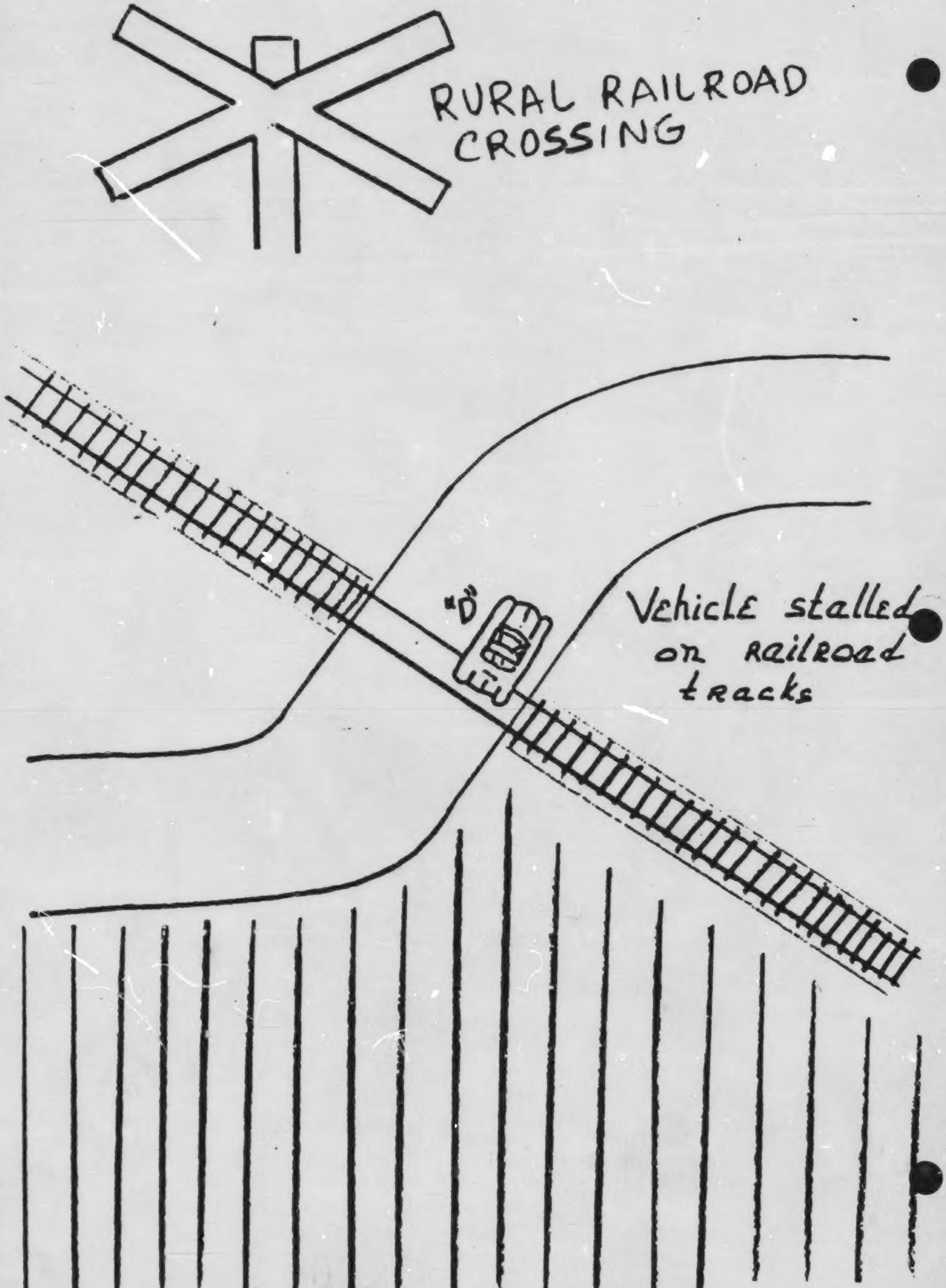
3. Transparency #3, Situation C6-3.

   Would having a blow-out here change the procedures to be followed?

   Possible Answer: For the most part, no. The driver would still have to keep away from hard braking, bring the speed of the car down slowly and pull off the road. One additional thing might be to warn the driver behind by perhaps turning on the 4-way flashers or by applying pressure lightly on the brake pedal to turn the brake lights on. Because of the merging vehicles on the right, it may be necessary to brake some more than normal!

LOCAL HIGHWAY INTERSECTION SITUATION B4-3

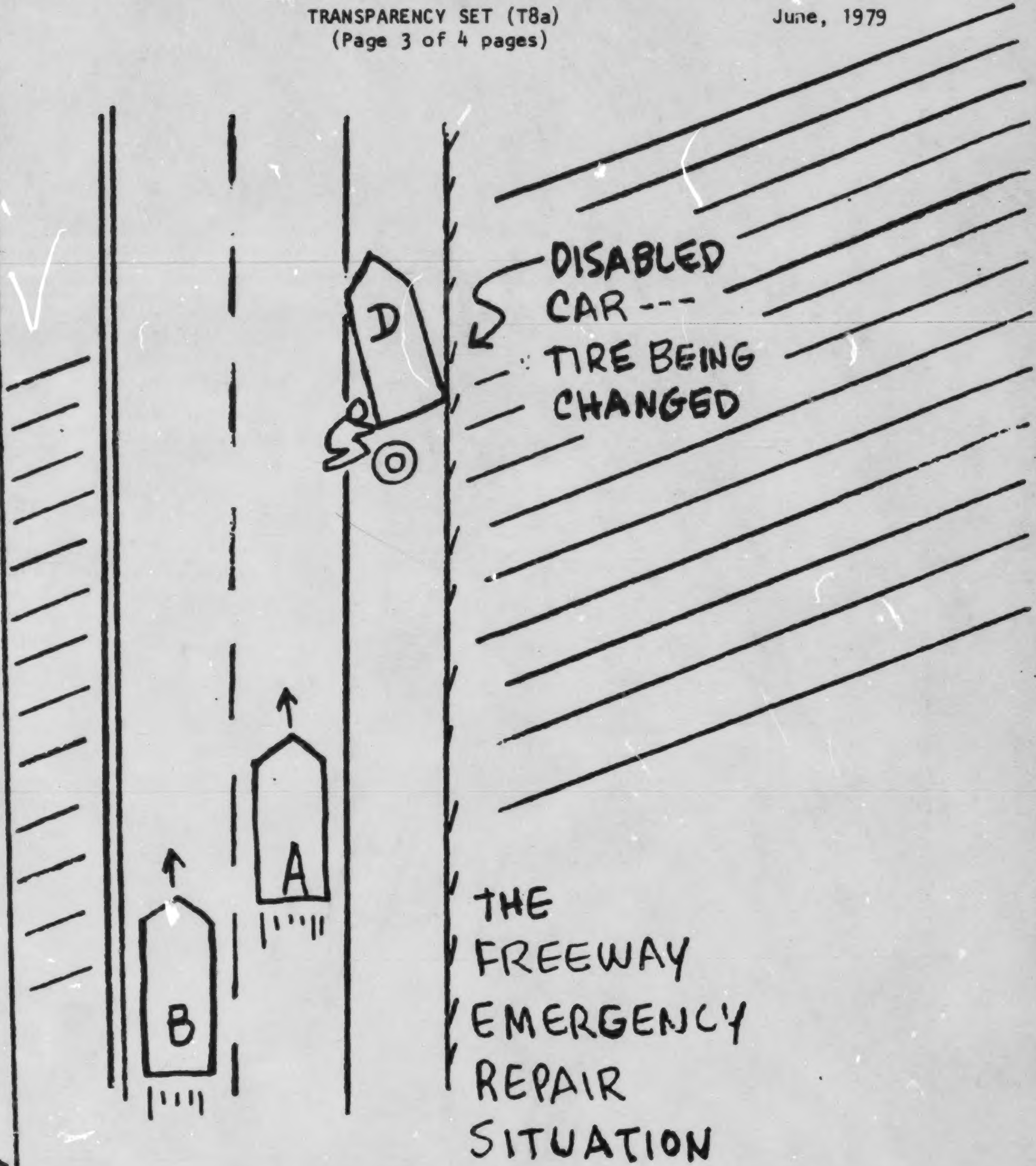
RURAL RAILROAD CROSSING


"D"
Vehicle stalled on railroad tracks

TRANSPARENCY SET (T8a)
(Page 3 of 4 pages)

June, 1979

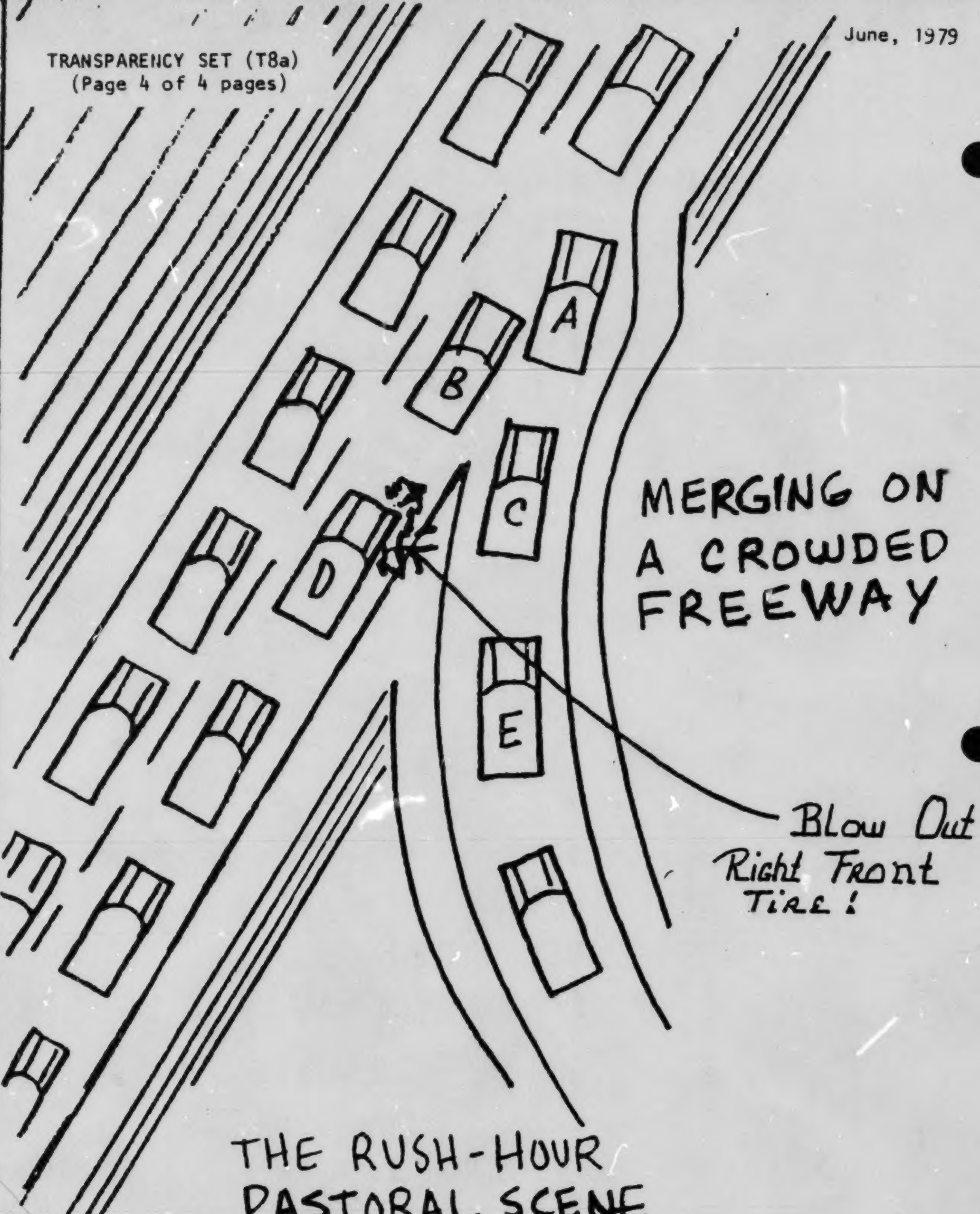
FREEWAY TRAFFIC FLOW SITUATION C5-1


DISABLED CAR --- TIRE BEING CHANGED
D
A
B
THE FREEWAY EMERGENCY REPAIR SITUATION

TRANSPARENCY SET (T8a)
(Page 4 of 4 pages)

June, 1979

FREEWAY INTERCHANGE SITUATION C6-3


A
B
C
D
E
Blow Out Right Front Tire!

MERGING ON A CROWDED FREEWAY

THE RUSH-HOUR PASTORAL SCENE

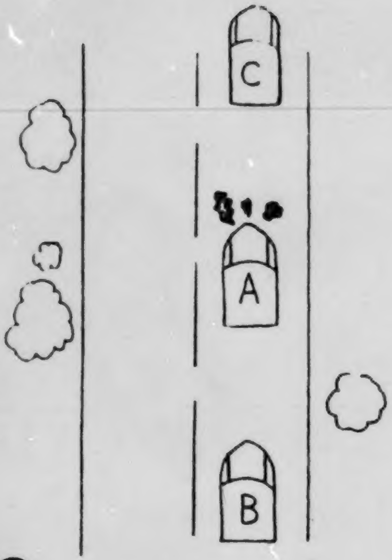
June, 1979

WORKSHEET (W8b)

(Page 1 of 4 pages)

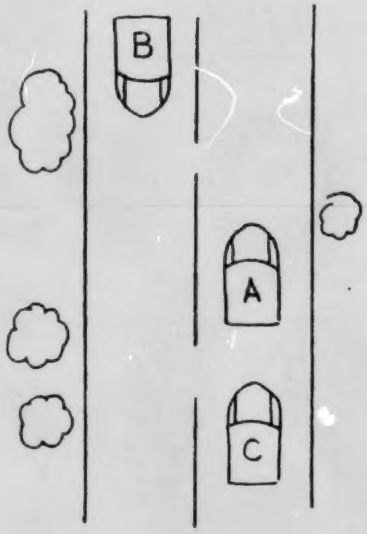
Directions: You are the driver of Car A in each of the following situations which involves a vehicle malfunction or breakdown. View each situation and indicate what you think the vehicle malfunction or problem is by circling your choice in #2 by each situation. Then indicate the justifiable measure(s) you could take by circling your choice(s) in #3 by each situation.

(1)



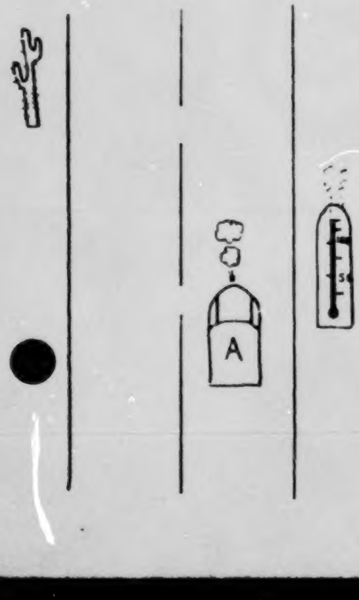
1. Situation--as you drive down a rural highway you smell and see smoke coming from under your hood.
2. The malfunction(s) may be:
   a). Your front brakes are hot.
   b). There is a fire in the engine.
   c). Your vehicle is overheating.
3. What measure(s) would you take?
   a). Find a service station for assistance.
   b). Pull off the road and attempt to put out the fire.
   c). Pull off the road, turn off the key, secure the car and get the passengers and yourself out of the vehicle.

(2)



1. Situation--you are travelling at 45 MPH on a rural highway when your engine quits.
2. The malfunction(s) may be:
   a). You are out of gas.
   b). You have a mechanical failure involving ignition.
3. What measure(s) would you take?
   a). Shift to neutral and restart the engine.
   b). Coast to the side of the road and try to restart the engine.
   c). Stop your vehicle well off the road and seek help.

(3).

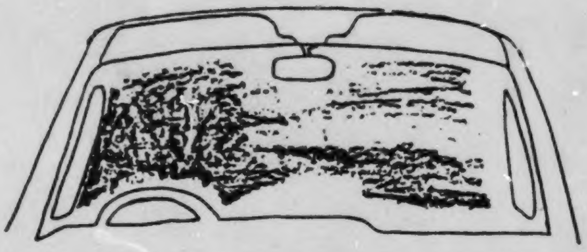


1. Situation--as you are driving,steam begins to come out from under your hood.
2. The malfunction(s) may be:
   a). The vehicle is overheating.
   b). The vehicle is getting rid of excess water.
3. What measure(s) would you take?
   a). Stop the car immediately in a safe area.
   b). Remove the radiator cap.
   c). Allow the engine to cool, remove the radiator cap utilizing a rag to prevent burns, and add water.

June, 1979

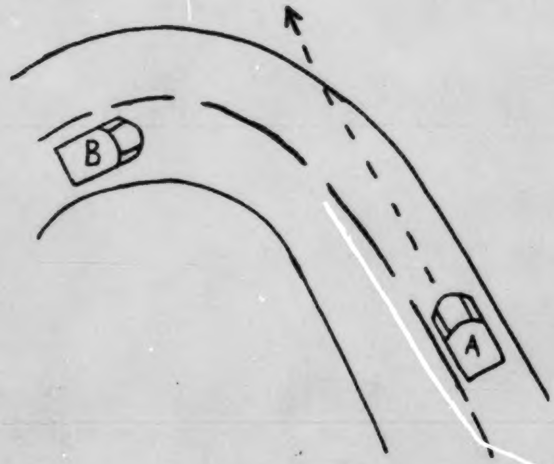
WORKSHEET (W8b)
(Page 2 of 4 pages)

(4)



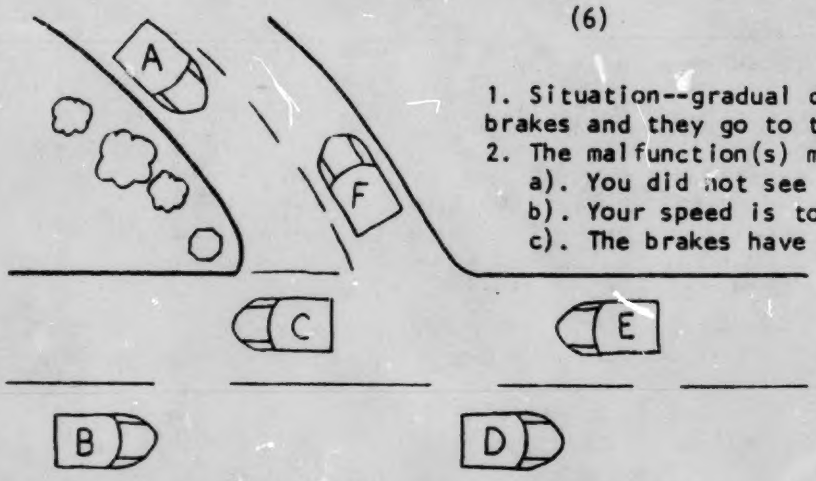
1. Situation--you are travelling 45 to 50 MPH on a rural highway and suddenly you have no forward vision.
2. The malfunction(s) may be:
   a). The hood flies up.
   b). Weather conditions.
   c). Your vision is failing.
3. What measure(s) would you take?
   a). Re-adjust your vision, look around or under the hood to see some roadway.
   b). "Hit" the brakes hard.
   c). Steer off the road immediately.
   d). Look out the left front side window at the center line while slowing and preparing to stop.

(5)



1. Situation--as you enter a curve, you find your vehicle will not turn but continues straight.
2. The malfunction(s) may be:
   a). You misjudged the curve.
   b). Your steering failed.
   c). Your speed was too fast for the curve.
3. What measure(s) would you take?
   a). Try more force to turn the wheel.
   b). Brake as much as possible without throwing the car into a skid.
   c). Accelerate.
   d). "Pump" the brakes.

(6)



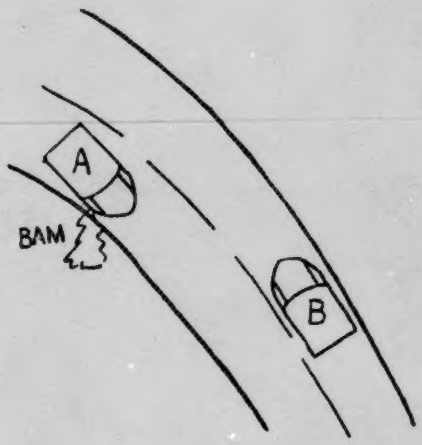
1. Situation--gradual downhill slope - you apply the brakes and they go to the floor.
2. The malfunction(s) may be:
   a). You did not see the intersection in time.
   b). Your speed is too fast to stop.
   c). The brakes have failed.
3. What measure(s) would you take?
   a). Shift to park first.
   b). Pump the brakes, downshift, apply the park brake, and escape to the shoulder.
   c). Try to weave through traffic.
   d). Shift to park if nothing else will stop the car.

WORKSHEET (W8b)

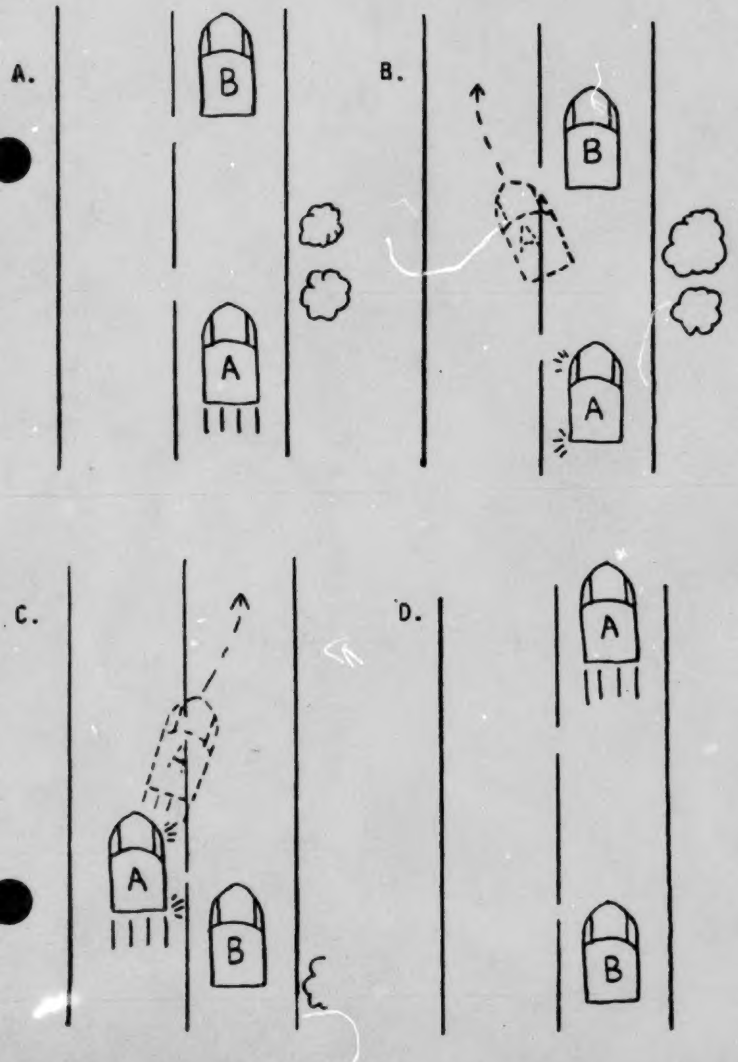
(Page 3 of 4 pages)

(7)

1. Situation--you hear a bang, the vehicle wobbles, and pulls hard right.
2. The malfunction(s) may be:
   a). You had a blow-out.
   b). The front end needs to be aligned.
3. What measure(s) would you take?
   a). Correct by steering only.
   b). Let up on the gas, don't brake at first, hold a course in the lane and ease off road.



(8)

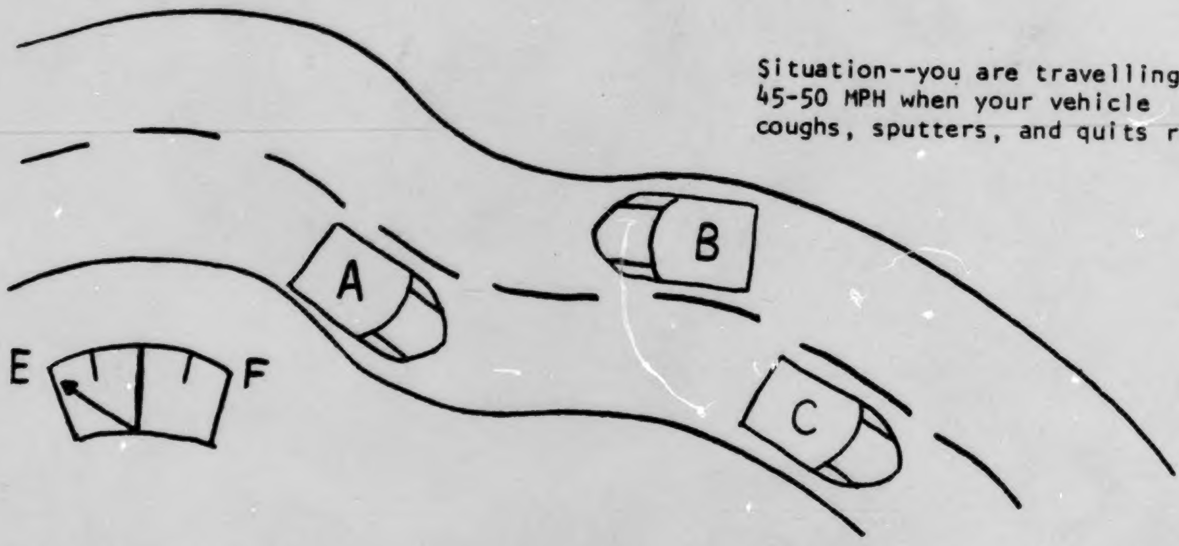


1. Situation--you have been following Car B for a while and now decide you have room to pass (A). You begin to pass and push the accelerator all the way to the floor (B). Once past car B, you return to the right lane and let off the accelerator (C). You discover your speed is still increasing (D).
2. The malfunction(s) may be:
   a). You have a "lead foot."
   b). You have a stuck accelerator.
3. What measure(s) will you take?
   a). Turn off the key and coast to the side of the road.
   b). Pry up the gas pedal with your toe while keeping your eyes on the road.
   c). If you can't unstick the accelerator with your toe, reach down and pull it up with your hand since you are on a wide open road.

June, 1979

WORKSHEET (W8b)
(Page 4 of 4 pages)

Directions: Answer the questions in the spaces provided.



Situation--you are travelling 45-50 MPH when your vehicle coughs, sputters, and quits running.

1. How would you react?

2. At this point, what things do you have to do once you are off the road?

3. How can you warn other vehicles of your problem?

4. When stalled on a roadway, what are some ways to obtain assistance?

5. Suppose the only way you can move Vehicle "A" home is to push it or tow it. What considerations and procedures should you follow when pushing or towing a vehicle?

May, 1979

INFORMATIONAL FLYER IF8c
(Programmed Learning Package)
(Page 1 of 9 pages)

Techniques in Avoiding Collisions

The purpose of this programmed learning package is (1) to acquaint you with the techniques of emergency maneuvering, (2) to have you develop the ability to recognize the situations where these maneuvers can be used, and (3) to identify some potential dangers involved in using these maneuvers in traffic. By the end of this program you should have acquired a base or background of knowledge concerning emergency maneuvers that will allow you to make alternative decisions when confronted with potential conflicts.

Emergency situations develop every day you drive. Since you have little control over other drivers and sometimes you, yourself, will make driving errors, it is almost impossible to predict when these situations will arise. In order to be prepared for these situations you, as a driver, must have a background of knowledge concerning emergency maneuvers which will allow you to take appropriate action when confronted with these emergencies. On the following pages you will cover, in programmed form, the techniques used for various emergency maneuvers, general situations where these maneuvers could be used, and some of the dangers involved in each.

To gain the most from this package, you should follow the directions below:

The answers to the blanks and the questions will be given on the right-hand margin. Cover the answers with a sheet of paper before you begin reading. Then as you read, fill in the blanks and answer the questions in your mind. DO NOT WRITE IN THE BLANKS, so this package can be used by others. If you are not sure of any answer, first go back to the previous paragraph. Your clues to the answer should be in the previous paragraph. If you are still not sure, read on through the paragraph after the blank or question. Your clue could be found after the blank or question. Once you have decided on an answer, refer to the answer key on the right margin to see if your answer is correct. If it is not correct, make sure you understand why it is not correct, and what the correct answer is before you continue. Most generally, the answers are a clue to the blanks that follow it. Remember that this package is a learning device, and it is not to be considered any form of test. After you have finished reading this package, complete Worksheet W8c.

INFORMATIONAL FLYER IF8c
(Programmed Learning Package)
(Page 2 of 9 pages)

Avoiding or Minimizing Impact Emergency Maneuvers

QUICK BRAKING

In order to be skillful in the use of quick braking, you must be able to move your right foot from the accelerator to the br______ "as rapidly as possible" and then push down on the ________ as fast and as firmly as you can, without having the tires skid.	(br)ake brake
The difference between this and all-out emergency braking is that emergency braking requires you to jam on the brake as hard as you can, thus producing a s_____. Once the vehicle ______, it takes you longer to stop.	(s)kid skids
The technique of stopping in an emergency without s______ is known as ________ braking. The quick braking technique is often difficult to learn, for many reasons. Since, from the beginning of the course, you have been instructed to brake gradually, you are conditioned not to hit the brake hard. In some situations you must prepare yourself to do this. Practice in this technique, even mental practice, is necessary to overcome the urge to make a slow, smooth stop. The ______ braking technique requires you to stop rapidly without ____________.	(s)kidding quick quick skidding
The _______ __________ technique is useful in situations where something is directly in front of your vehicle. These situations come up most often because you, the driver, are not paying enough attention to your task, or you are distracted by some other factor. The negligence of other drivers is another factor which causes these situations to develop.	quick braking
Two of the main reasons that quick braking situations develop are lack of __________ by you as a driver, and _________ of other drivers.	attention/negligence

QUICK STEERING

Often, when confronted with emergencies, you may find it necessary to st________ quickly to avoid a crash. To prepare yourself for this maneuver, you must first determine which hand position on the _________ wheel you will give your maximum control. Normally, you are encouraged to use the 10 and 2 position for the best control under most driving conditions. There are generally two other hand positions which have proven to be of value in emergency maneuvering. The first is the 9 - 3 position. By simply moving the hands down on the steering wheel to the middle, you will have a wider range of ________ when moving the wheel left or right, without changing hand position. The other hand position is the top wheel technique. This technique is accomplished by putting both hands fairly close together at the top of the wheel. This allows you to steer quickly in either direction, with a wide range of motion with either hand. _______ steering can be accomplished from almost any hand position, but the three most common are the ____ & ____, ____ & ____, and the __________ wheel techniques. It should be noted that once	(st)eer steering steering Quick 10 - 2, 9 Top

you have chosen your hand position for the maneuver, you should maintain that position until the maneuver is completed. In order to use any technique you must be preparing for (predicting) emergencies to develop. Quick vision checks for side hazards must be made prior to a quick steer maneuver.

In many emergencies, _________ is more effective than braking to avoid conflict with obstacles. The use of _______________, when faced with a hazard approaching from the side, will allow you to get space to maneuver, provided the new path you select is clear. Some situations where this technique might apply are (1) a vehicle door opening in front of you, (2) a pedestrian stepping out from between parked vehicles, or (3) a vehicle pulling into an intersection when you have the right of way.	steering quick steering

QUICK STEERING & BRAKING

Some situations will call for a combination of the two techniques mentioned before. The technique for this maneuver is generally the same, but we must consider that we are now doing two different things at the same time. These two things, _________ and ________, require us to move two different parts of our body in two different directions. This will force us to give more attention to controlling the pressure on the _______ to prevent ______________, and controlling the movement of the ____________ wheel to prevent ________________. You will have a tendency to oversteer if you feel you are too close to the obstacle.	steering braking brake skidding/steering oversteering
Some situations where the _______ ___________ and _______ technique are used are (1) when a vehicle pulls into your lane, either an oncoming vehicle, or a vehicle going in your direction, and the escape lanes, left and right, are blocked, (2) when your lane is partially blocked, or (3) when a vehicle changes lanes suddenly in front of you, forcing you to maneuver.	quick steering/braking
_______ _________ and _________ are useful in situations where _________ braking alone will not avoid a collision, and then the ____________ adjustments help to avoid the accident.	Quick braking/steering quick steering

QUICK ACCELERATION

The quick acceleration technique is used at times when you have judged that, by moving faster, you can avoid a conflict. To use this technique, you must snap your foot down on the accelerator, to force the vehicle to quickly pick up speed. How much pressure you use on the accel_________ will depend on the performance capabilities of your vehicle. If you have a high-performance sports vehicle, the acc___________ pressure will not be very much. If you have a small engine, compact vehicle, you may have to push the _____________ down as hard as you can. This technique should be accomplished without spinning the tires, for maximum traction. The use of quick steering in combination with ________ ____________ may be necessary in some cases, to avoid a conflit, where slowing down or keeping your speed may increase your chances of having an accident.	(accel)erator (acc)elerator accelerator quick acceleration
Generally, ________ ___________ is useful in situations where other vehicles are moving toward your vehicle, and where	quick acceleration

May, 1979

INFORMATIONAL FLYER IF8c
(Programmed Learning Package)
(Page 4 of 9 pages)

keeping the same speed, or slowing down, will make it more likely for you to have an accident.

SKID CONTROL

Skidding is a fact of driving that plays a big role in traf-
fic accidents. Research has shown that ski________ is a major (ski)dding
factor in one out of every four serious accidents. Translated
into statistics, it is estimated that s____________ is probably (s)kidding
responsible for about 10,000 deaths and 300,000 injuries each year.

Consider a vehicle moving over a road. Some of the control
factors at work include the road surface, road construction,
wheel camber and caster, temperature, the vehicle's suspension,
weight distribution, center of gravity, and the type, condition,
and balance of the tires, and of course, the driver. These fac-
tors all play a part in ____________. To determine exactly skidding
what role each factor plays, you would need a computer. Fortun-
ately, there is one key factor which governs the rest---TIRES!
Since tires are the points where the vehicle comes in direct
contact with the road, anything the vehicle does, including any
________________ is ultimately translated through them. skidding

Friction, the "grip" between the tires and the road, allows
the vehicle to start, stop, and/or corner. Under normal driving
conditions, there are two types of frict_____ at work; static, (frict)ion
and rolling or dynamic friction. Once a vehicle is ___________, skidding
a third type of f___________, sliding, is also present. (f)riction

There is a greater amount of ____________ between a station- friction
ary wheel and the road than there is between a slid______ wheel (slid)ing
and the road. Picture a vehicle parked on an icy hill. The
brakes are locked so that the wheels cannot roll. It might take
three or four men to get the vehicle moving. When they do, it
stays in motion and sl__________ to the bottom of the hill. As (sl)iding
long as the vehicle is not being pushed, st_________ friction (st)atic
keeps the vehicle from sliding down the hill. However, once the
men push hard enough to overcome the ____________ friction, the static
vehicle continues to slide on its own. This demonstrates that
sl_____________ friction does not grip the road as well as (sl)iding
____________ _______________. static friction

Now, let's picture the same vehicle, with a driver in it,
being pushed by the same men -- only this time the wheels are
rolling, and the driver is lightly braking, but not locking the
brakes. With the men pushing the vehicle, the wheels will con-
tinue to roll, because there is less ____________ between a roll- friction
ing wheel and the road than there is between a stationary wheel
and the road. When the men stop pushing, the vehicle comes to
a stop, demonstrating that there is more __________ between a friction
rolling wheel and the road than there is between a sliding wheel
and the road. This illustrates the value of keeping the wheels
rolling.

May, 1979

INFORMATIONAL FLYER IF8c
(Programmed Learning Package)
(Page 5 of 9 pages)

When is the amount of friction greater? When the wheels are (A) sliding or (B) rolling? ________	(B)
We have seen that __________ is greatest when the wheels are ________; friction between a _________ wheel and the road is slightly less; and friction is least when the wheels are locked and can ______________.	friction stopped/rolling slide or skid
The understanding of these three types of friction is important to a driver. When you understand friction, and how it changes, you can appreciate how friction between the tires and the road is not constant. Sand, or water on the road, for example, decreases the level of __________. Above all, you should know that as your speed increases, the friction between the tires and the road decreases.	friction
There are six basic types of skids. Although there is no one way to handle any particular sk________, there are certain rules and techniques that can be applied to help control______. Four basic rules are:	(sk)id skidding

1. Do not use your brakes until steering control is reestablished.
2. Do not accelerate!
3. Depress the clutch, if you're driving a manual shift vehicle.
4. "Countersteer" to correct for the skid.

As you read about the six basic skids, you'll see why these four rules are so important.

FRONT WHEEL BRAKING SKID

This _____ is caused by unbalanced brakes. Frequently, the situation results due to the fact that the front bra_____ are set up tighter than the rear brakes. When you b______ hard, the front wheels lock. As the vehicle begins to ______, you suddenly find that you cannot steer, no matter how you turn the wheels, and the vehicle continues straight ahead. Locked front wheels cannot turn the vehicle.	skid (bra)kes (b)rake skid
When a vehicle is in a front wheel braking skid, all of the available friction at the front tires is being used up by the __________. No cornering force can develop. At the same time, the rolling rear wheels act as a "rudder" to keep the vehicle going in a straight line. If you've stepped on the brakes to steer around an obstacle, you'll undoubtedly find the vehicle skidding into whatever it was that you were attempting to avoid.	skid
What can be done about this skid? Should you (A) turn away from the skid or (B) get off the brakes? ________	(B)
Let the tires re-establish rolling friction. Countersteer by keeping your front wheels aimed straight ahead. Be sure to maintain proper brake adjustment to help the _______ ________ __________ _______.	front wheel braking skid

May, 1979

INFORMATIONAL FLYER IF8c
(Programmed Learning Package)
(Page 6 of 9 pages)

REAR WHEEL BRAKING SKID

In this skid, the vehicle spins 180° and ends up going backward. It occurs when the rear wheels lock up and then they can slide just as easily in any direction. As soon as the vehicle turns slightly, the rear wheels slide sideways and spin the vehicle around. Again, when this type of skid occurs, "G____ O____ T____ B_____" and counter __________ in the direction the the rear of the vehicle is skidding. With the brakes off, the tires can re-establish ro________ friction and, by st_________, you should be able to bring the vehicle back in line.

(G)et (O)ff
(T)he (B)rake/steer
(ro)lling/(st)eering

Countersteering, turning the steering wheel in the direction the rear end of the vehicle is skidding, is probably the most important corrective steering step that anyone can learn. Up to a certain point, a vehicle can be kept under control if you count__________ correctly. However, your reaction to a skid must be executed quickly and accurately. There is a critical angle, a "point of no return". If you have not regained control of the vehicle before it skids 15° - 25° from center line, then you won't be able to keep it from spinning completely around.

(count)ersteer

Properly adjusted __________ will assist in preventing both front and rear wheel braking skids.

brakes

ALL WHEEL BRAKING SKID

This is one of the most common skids, the type of skid that occurs even if the brakes are adjusted properly. It occurs when the driver jams on the _________ too hard; usually in a panic situation; causing all four wheels to lock and begin to _____. The vehicle will, under these circumstances, slide unpredictably in any direction.

brakes
skid

It's much like the front wheel braking skid, except that the ___________ wheels have lost their grip too, therefore, there's no "rudder" effect to keep the vehicle going straight ahead.

rear

Correcting this skid is easy to understand, but it is difficult to accomplish. SIMPLY "_____ ______ _____ _____" and let THE TIRES RE-ESTABLISH __________ __________. This takes practice; for when a vehicle is in a violent skid, the natural reaction is to keep the brakes locked.

GET OFF THE BRAKES
rolling friction

POWER SKID

This skid is the result of accelerating too fast for road conditions. Power applied to the driving wheels overcomes the grip of the tires, causing them to spin. When a tire is spinning, it has no f___________ to keep the wheels from slipping sideways. Generally, the vehicle "fishtails"--swings back and forth. However, if you're going fast enough, the slope of the road may cause the vehicle to spin completely around. A vehicle in a p________ s_________ acts essentially the same as a vehicle skidding with its rear wheels locked.

(f)riction

(p)ower (s)kid

May, 1979

INFORMATIONAL FLYER IF8c
(Programmed Learning Package)
(Page 7 of 9 pages)

To control a ________ ________, ease up on the acc________, let the vehicle stabilize, and ________ gently.	power skid (acc)elerator/brake
The most severe ________ ________ can cause power spin-out, triggered by accelerating through a corner or sharp curve. The change from rolling to ________ friction is sudden and violent; the vehicle may spin completely around several times. Regaining control is very difficult. If you aren't ready for this reaction, and don't respond correctly immediately, the vehicle will ______ out of control. Attempt to regain control by keeping your foot off the b________ and a________ pedal and then co________.	power skid sliding spin (b)rake (a)ccelerator/(co)untersteer
If the vehicle is simply going too fast, and it is obvious that you cannot stay on the road, try to aim the vehicle for a clear spot where you can stop without hitting anyting, or try to hit as soft an object as possible. C________, at the right time, can make the difference between hitting a tree and skidding into an open field. Braking may not be helpful in this situation. Above all, to avoid getting into such a situation, remember to slow down prior to going into a turn.	(C)ountersteering

SPIN-OUT

Spin-outs may occur as a result of several factors. You're rounding a corner and hit a patch of ice, or loose gravel. You suddenly discover that a corner, or curve, is sharper than you had anticipated. In either situation, as you try to keep the vehicle on the road, the rear tires break loose and the vehicle whips around.	
The dynamics of this ________ are easy to understand. If you've ever seen a chain of skaters playing "crack the whip," you've seen the principle involved in a spin-out. When the lead skater suddenly stops, the rest of the chain is "whipped" around him. Like the lead skater, the f________ tires of a vehicle being driven through a corner are the pivot points for the ________ tires to swing around. This means that the side thrust is greater at the ______ tires. The cornering forces at the rear wheels overcome the ________ of the tires and the vehicle spins.	skid (f)ront rear rear friction
The spin-out is a very difficult skid to control. Keeping the vehicle on the road, and pointed in the right direction, may be the best you can hope for.	
COUNTERSTEER -- keep the vehicle pointed in the right direction, if you can do so, and still keep the vehicle on the road. You can avoid this type of skid by avoiding driving into curves and corners at speeds too ________ for conditions.	fast

May, 1979

INFORMATIONAL FLYER IF8c
(Programmed Learning Package)
(Page 8 of 9 pages)

STAB BRAKING

There is one other driving technique that is taught at skid control schools -- "stab" braking. This technique can be used in slippery conditions such as rain or snow, where steering control is vital. However, the technique should not be used when the vehicle is skidding or being driven through a curve. It can be used safely only when the vehicle is traveling in a straight line. This technique is called "stabbing" -- applying the
br__________ in a series of quick thrusts. The brakes are hit (br)akes
hard, held for only a split second, and then released. For a moment, the front end dips down and the weight of the vehicle shifts to the front wheels. The tires hold the road better because of this weight shift, giving you better control. The effect lasts for only about one-half second. In order to keep
the weight transfer to the f______ wh________, the brakes must (f)ront (wh)eel
be stabbed every half second.

The braking technique of hitting the brakes hard at half-
second intervals is called _________. stabbing

RUN OFF ROAD

There may be times when, even in normal situations, you either allow your vehicle to go off the edge of the roadway, or some other vehicle forces you off the roadway edge. The ability to recover from this is necessary, simply because you cannot predict whether or not it will happen. How you recover may vary, according to the situation but basic responses should be kept in mind.

If your right side wh_______ drop off the pavement edge, onto (wh)eels
a soft shoulder, the appropriate response is to (1) hold the steer-
ing wheel steady, (2) allow the vehicle to sl_____ d______ grad- (sl)ow (d)own
ually, (very light and gradual braking might be necessary, if
obstacles are ahead), (3) when a very s______ speed is reached, (s)low
check traffic and turn wheels sharply to the left, to bring the vehicle back onto the pavement. A point to remember about different pavement edges is that if the edge is smooth (no drop off), then return smoothly; if the edge is sharp (3-6 inch drop), re-
turn sharply. Avoid slamming on the __________ or trying to brakes
steer back onto the pavement at high speeds. Either of these
actions can produce a dangerous ___________, or cause a rollover. skid

PROBLEMS THAT CAN ARISE WHEN NECESSARY TO USE EMERGENCY MEASURES

With the use of emergency maneuvers comes potential dangers that should be considered. The quick braking technique increases your chances of being hit from the rear. Since there is more of a chance of being hit from behind when using this technique, you should not use it if it might create an unneeded risk of collision
with the vehicle __________ you. Quick braking also increases behind
the possibility of ___________, especially on slippery surfaces. skidding
If skidding does develop, remember to "_____ _____ _____ _______." GET OFF THE BRAKES
The main danger involved in quick steering is that you may steer

May, 1979

INFORMATIONAL FLYER IF8c
(Programmed Learning Package)
(Page 9 of 9 pages)

into the path of other vehicles or into roadside hazards. This
is also to be considered when quick steering and quick braking
are used in combination. At high speeds, quick steering also
increases the likelihood of lateral ________ or even turning over. skidding

The use of quick acceleration may sometimes be necessary,
but remember that a poorly timed, quick ___________ may cause acceleration
the accident you are trying to avoid. Another danger of sudden
acceleration is that it ____________ the likelihood of colliding increases
with obstacles in (or entering) your path ahead. The need for
quick acceleration can normally be avoided by recognizing the
emergency at an earlier point, as it is developing. When these
emergencies are recognized, you can adjust to them before they
call for an emergency maneuver.

When responding to "run off the road" situations, you must
be ready to quickly __________ the conditions. Once you identify
______________ theconditons, then you can determine how you identify
will respond. If your brakes must be applied, then they must
be gradually applied. If your brakes aren't gradually applied,
then they could cause __________. Steering back onto the road, skidding
at high speeds, could cause skidding. Braking on soft shoulders
could pull the vehicle off the road. Off-road obstacles may also
be present.

You must evaluate the conditions before you decide which response to use.

When you have responded to a situation, you must be prepared
to change your response if the situation changes. You must have
alternatives available for you to use, when you see that your
response is not going to work. Alt__________ are different res- (Alt)ernatives
ponses to changing conditions. These must be available, since
the use of a single, emergency maneuvering technique may not
allow you to avoid conflict.

May, 1979

WORKSHEET W8c
(One Page Only)

1. The ____________ ____________ technique is used normally when your path ahead becomes blocked, with no escape routes.

2. A good hand position for quick steering is the ____________ position.

3. When faced with a hazard partially in your lane, and braking alone may not allow you to avoid the hazard, you must ____________ away from the hazard, provided your escape path is clear.

4. Turning the steering wheel too far in any one direction is called ____________.

5. When slowing down, or keeping the same speed would increase your chances of an accident, you should use the ____________ ____________ technique.

6. There are three types of friction, ____________, ____________, and ____________.

7. Friction between the tires and the road is greater in ____________ friction than in sliding friction.

8. One of the best ways to avoid skidding and to regain control is to "____________ ____________ ____________ ____________."

9. Under normal conditions, when you have run off the road, you should ____________ ____________ gradually and turn ____________ back onto the road.

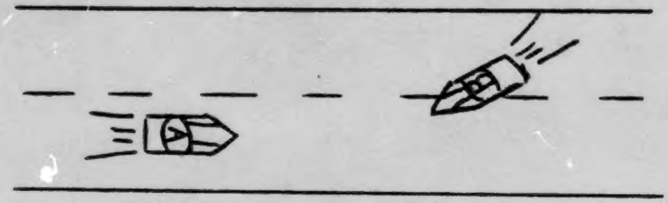
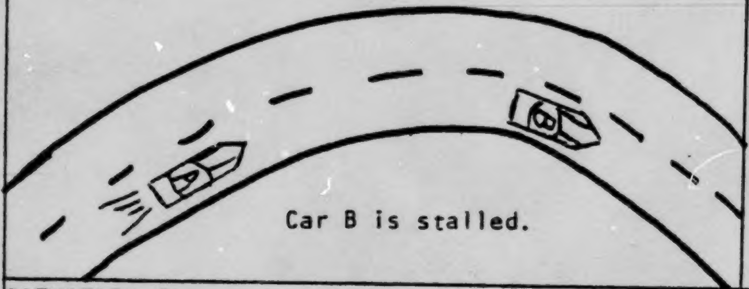
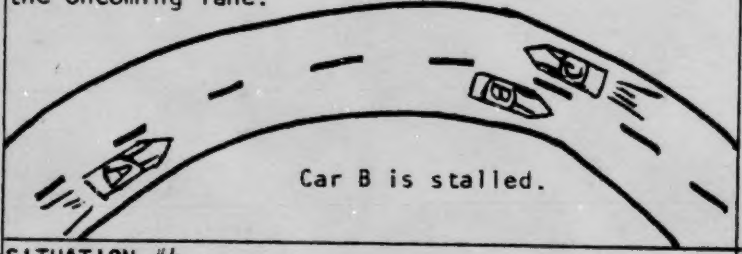
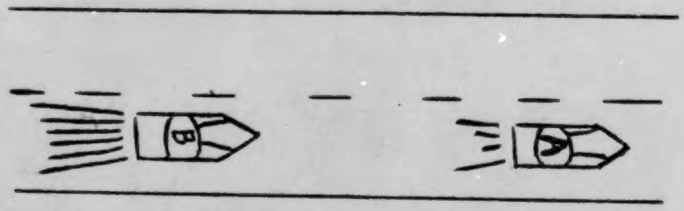
10. The best way to lessen your chances for the need to use emergency maneuvers is to ____________ the conditions, ____________ the actions of other drivers, and ____________ what course of action you will take before the emergency develops.

June, 1979

WORKSHEET (W8d)
(Page 1 of 2 pages)

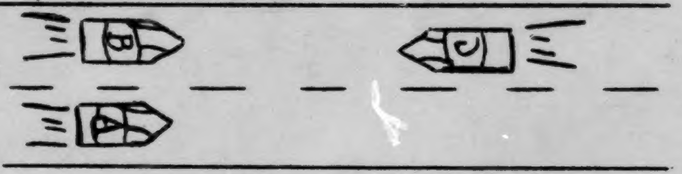
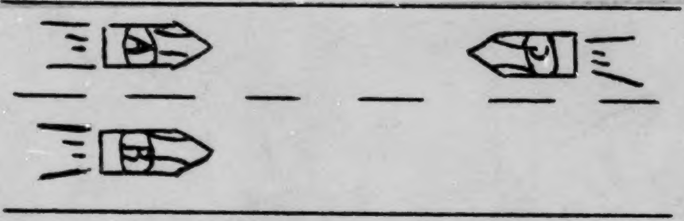
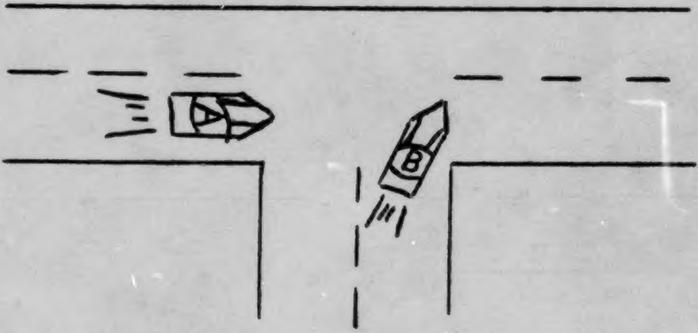
Evasive Maneuvers

Directions: In the following situations, evasive maneuvers or actions are necessary. Write in the space to the right, evasive action you would take to avoid impact or keep it to a minimum. Consider yourself as the driver of Car A.

SITUATION #1 Car approaching crosses center line into your lane. 	ACTION
SITUATION #2 As you round a curve at 55 MPH, you come upon a stalled vehicle in your lane. 	ACTION
SITUATION #3 As you round a curve at 55 MPH you come upon a stalled vehicle and an approaching car visible in the oncoming lane. 	ACTION
SITUATION #4 As you are driving down a long hill, you see a runaway vehicle approaching from the rear. 	ACTION

June, 1979

WORKSHEET (W8d)
(Page 2 of 2 pages)

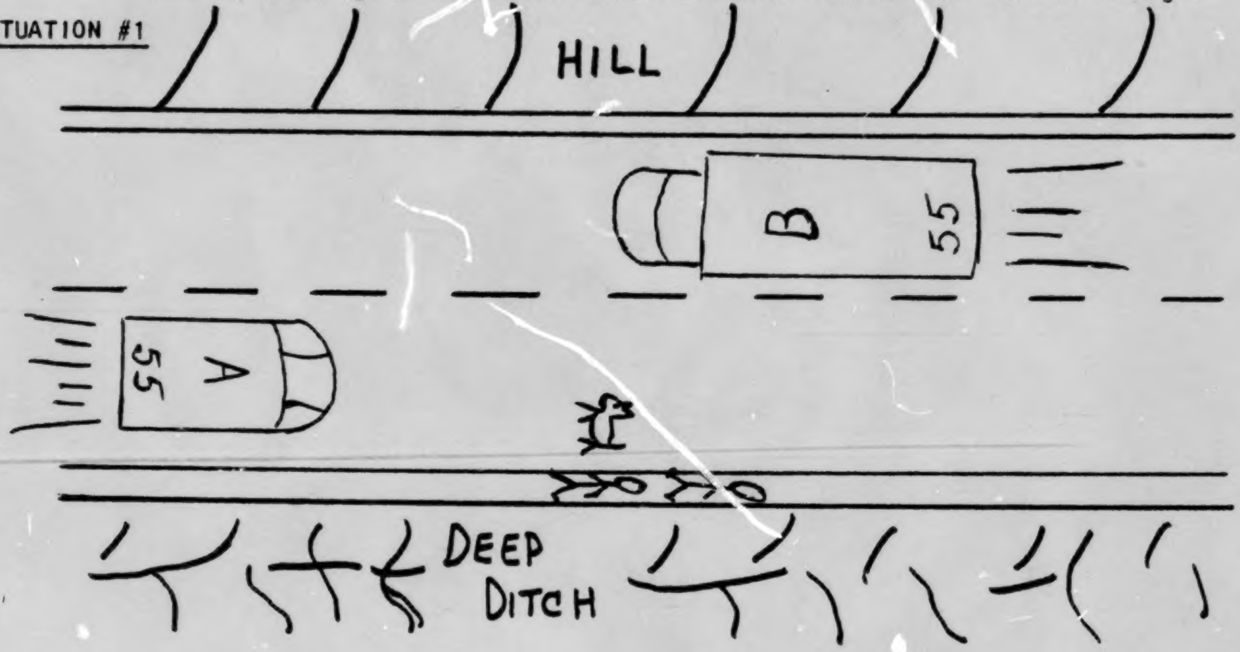
SITUATION # 5 As a car is passing you, and gets alongside, an oncoming vehicle appears out of a dip in the road and is too close for the passing car to complete the pass. 	ACTION
SITUATION #6 Same as # 5 except that you are passing. 	ACTION
SITUATION # 7 A car turns in front of you in an intersection at the last minute. 	ACTION

June, 1979

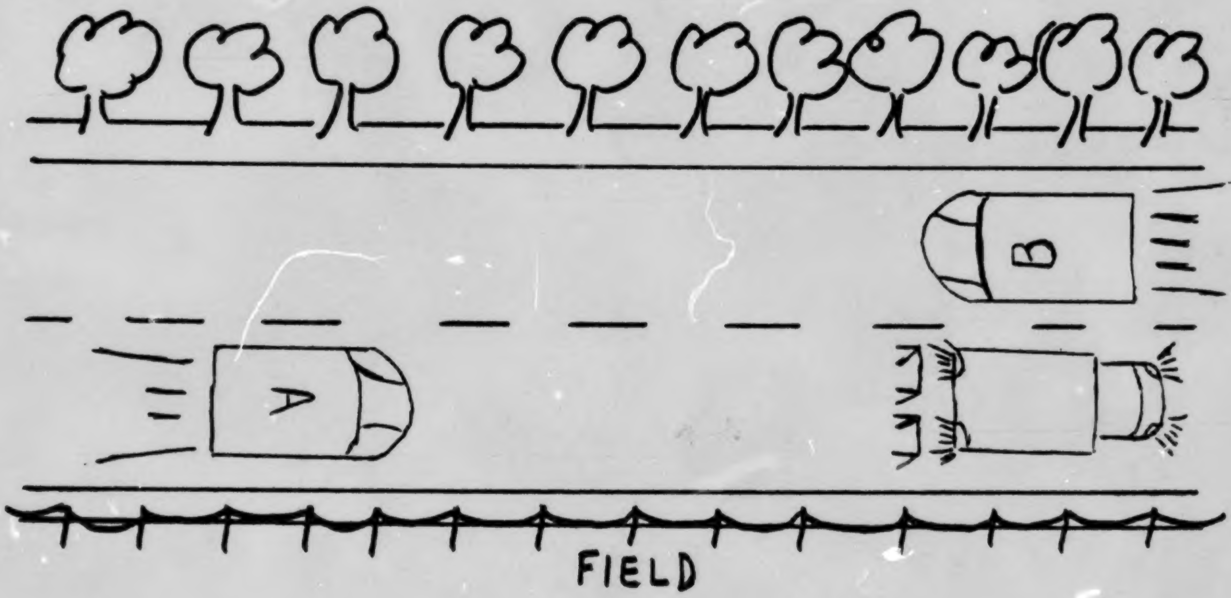
WORKSHEET (W8e)
(Page 1 of 2 pages)

Directions: On a separate sheet of paper describe the best route of action each driver of vehicles labeled with letters should take which would result in the least amount of harm and damage for all involved. Substantiate each answer by stating how alternative actions would cause more harm or damage.

SITUATION #1



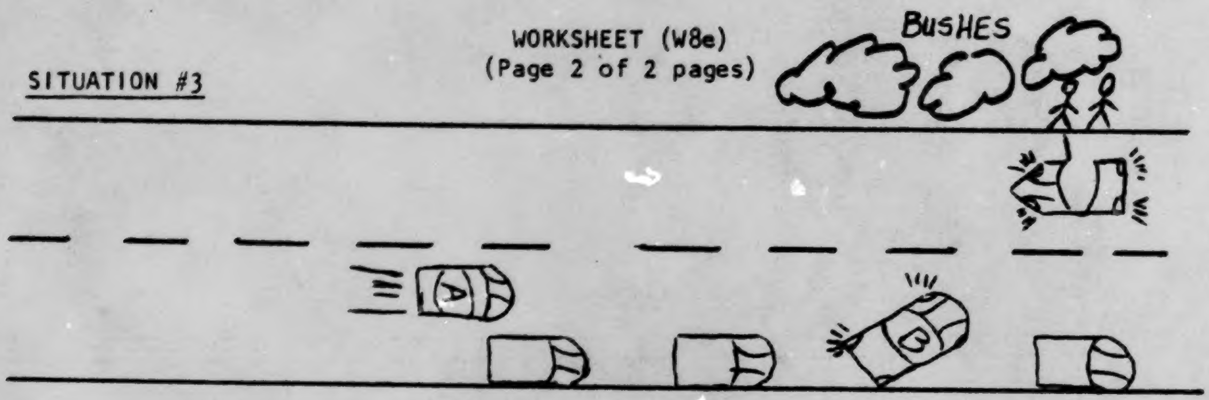
SITUATION #2



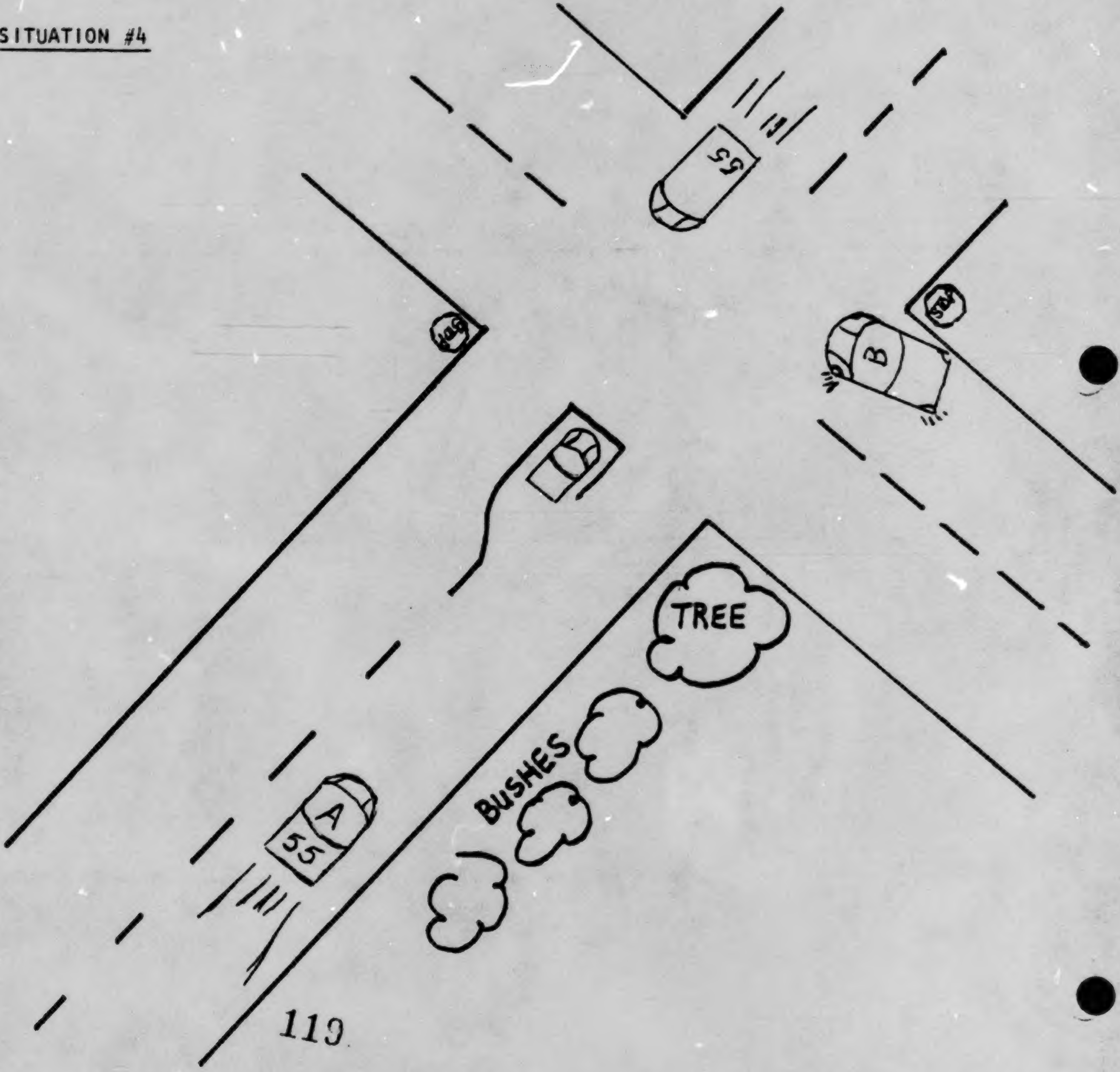
June, 1979

WORKSHEET (W8e)
(Page 2 of 2 pages)

SITUATION #3



SITUATION #4


55
STOP
STOP
B
TREE
BUSHES
A
55

June, 1979

TEACHER-LED DISCUSSION
(Student Learning Activity #14, Module 8)
(Page 1 of 2 pages)

Directions: Follow directions in each part when given. The questions are to be asked of the students.

1. Review procedures to be used when the wheels on one side of the car or other drop off the pavement edge.
   - Why do you need to turn sharply back onto the pavement?

   Possible Answer: Because if the driver turns slightly or slowly, the front wheel may climb onto the pavement and the rear wheel may "hook" on the pavement and cause the car to go into a broadside skid.

   - Why should you wait until you have the car slowed down before returning to the pavement?

   Possible Answer: Because at the higher speed, the predictability of what reaction the car will have, because of possible "hooking" of the tires on the edge of the pavement, is lessened, therefore, creating a greater possibility of loss of control of the car by the driver.

2. What is meant by avoiding or minimizing impact?

   Possible Answer: Avoiding impact means to take action that keeps all that are in the situation from becoming involved in a collision. Minimizing impact may mean choosing between two collisions so that least harm comes to all persons involved; or it may mean choosing a "minor" collision to avoid a possible "major" collision such as a head-on; or it may mean preparing the vehicle and occupants in such a manner that in the event of a collision, harm to the occupants will be eliminated or reduced.

3. Much of the FS,C program "Minimizing Impact" dealt with what means of reducing harm?
   - What were some specifics of these means?

   Possible Answer: The preparation of the vehicle and its occupants for reducing harm in case of an accident. Specifics: safety belts, passive restraints, collapsible steering wheels, padded dash, recessed knobs.

4. What is force of impact?

   Possible Answer: It is the severity with which one object hits another. In our case, the force with which a car strikes another car, pedestrian or any other object.

5. What can we conclude about "force of impact" and death, injury, and damages?

   Possible Answer: The greater the impact, caused most directly by greater speed, the greater the chances for a fatality, more serious injuries, and extensive damage to property.

6. What principles should a driver consider in minimizing a collision?

   Possible Answer: Aim for the "softest" landing. Stay with it.

6a. What is meant by these two items? (Give examples. Ask specifically by the item when they come up.)

   Possible Answer: "Aim for the softest landing," means that when an accident is unavoidable, the driver chooses a path that would cause the least impact. Example: choosing to go off into the ditch rather than rear-ending a stalled vehicle.

TEACHER-LED DISCUSSION June, 1979
(Student Learning Activity #14, Module 8)
(Page 2 of 2 pages)

"Stay with it," means to continue to take evasive action (by whatever is appropriat in steering, braking, accelerating, turning off the engine, etc.) until the car is stopped and you have taken care of your passengers and yourself. Examples: don't throw your hands up in front of your face in fear. Even when the car is skidding and you don't seem to be able to get control, keep working at it by steering and/or accelerating.

7. What is the collision with the greatest potential danger? Why?

   Answer: Head-on. Because there is the combined speed of the two vehicles which greatly increases the force of impact.

8. What are the basic "escape actions" open to a driver when a crash is imminent? When are times you would or would not use each one?

   Answer: Steer right, hold steady and brake hard, steer left. Steer right, when keeping a straight path would end up in a collision with another vehicle or a pedestrian and the path to the right is "basically clear." Don't "steer right" if the path to the right has pedestrians in it.

   "Hold steady and brake hard," when paths to the right and left have more danger potential for others or for you--such as pedestrians on the right and an oncoming car on the left. Don't hold steady and brake hard if paths to the right or left are open and you can readily identify that.

   "Steer left" when the path to the right has more danger potential, holding steady and braking hard will end up in a collision, and the path to the left is clear. EXTREME CARE MUST BE USED IN DECIDING TO STEER LEFT--because of the great potential danger of a head-on accident.

9. What effect does the angle of impact have on the force of impact? Give examples.

   Possible Answer: It reduces the force of impact greatly. Example: hitting at a 45° angle makes a tendency to "glance off" rather than be stopped cold. Someone hitting you with a fist in the chest with the same severity--if straight on, much more impact (hurt) than if from the side where it will glance off (still hurt, but less so--and less possibility of damage).

10. What are some things traffic and highway engineers have done to help reduce the force of impact in collisions?

    Possible Answers: Guard rails around roadside "booby traps," provided more room to escape on shoulders of roads; barrels of sand or water at divide barriers; eliminating many "dips" in the road.

11. If there is a collision imminent, what should drivers and passengers do?

    Possible Answers: If belted with seat and shoulder harness and head rests properly adjusted, the driver and right front passenger should relax as much as possible and stay straight up; lean forward slightly for a frontal collision, lean back with head against head rest for a rear-end collision. Other passengers whether belted or not (but they should be) should assume the fetal position for frontal accidents; they should lay across the seat as much as possible with heads back against the seat in a rear-end accident.

12. What is meant by the statement: "In every collision, there are really two collisions?

    Answer: The first collision is when the car strikes another car or object. The second collision is when a person continues moving, when the car has been stopped by the collision, and strikes a part of the car or another person--or an object in the car keeps moving and strikes a person.

June, 1979

EVALUATION: E8a
(Page 1 of 2 pages)

Directions: Write the letter of the correct answer next to the corresponding number on the answer sheet. A total of 12 points is needed to pass.

(Each question is worth 1 point)

1. The first thing you should do when your accelerator sticks is to:

   a). Lift it with your right hand.
   b). Shift to a lower gear.
   c). Turn off the ignition.
   d). Slam on the brakes.

2. When you push the brake pedal and it goes all the way to the floor, what should you do first?

   a). Push harder on the pedal.
   b). Turn off the ignition.
   c). Apply the parking brake.
   d). Pump the brake pedal.

3. What is the first thing a driver should do when he senses a fire under the hood?

   a). Turn the engine off.
   b). Raise the hood and spray the fire with an extinguisher.
   c). Throw water on it.
   d). Throw dirt on it because water should not be used on an electrical or gasoline fire.

4. If an engine in an automatic shift car dies while you are moving in traffic, what is the best action to take?

   a). Stop promptly and restart the engine.
   b). Keep the selector in drive and restart since it won't matter if the car starts in drive since you wish to keep moving forward.
   c). Pull off the road to restart the engine.
   d). Shift to neutral and restart the engine while allowing the car to continue moving.

5. If your engine overheats, what is one thing you should not do?

   a). Run the heater.
   b). Open the radiator.
   c). Shift to neutral and speed up the motor.
   d). Turn off the air conditioner.

6. Sounding your horn to keep the car in the next lane from swerving into your path is:

   a). Safe and lawful.
   b). Unsafe but lawful.
   c). Safe but unlawful.
   d). Unsafe and unlawful.

7. Turning right into the right lane of a 4-lane street just as another car is passing by in the same direction in the inside lane is:

   a). Safe and lawful.
   b). Unsafe but lawful.
   c). Safe but unlawful.
   d). Unsafe and unlawful.

8. Which is the best action to take when your headlights go out when driving at night?

   a). Try to keep on moving.
   b). Drive to the nearest service station.
   c). Pull off the road immediately and stop.
   d). None of these is a desirable action.

9. When you cannot avoid an accident and you are faced with a head-on collision you should:

   a). Hit a fixed object rather than the oncoming car.
   b). Swerve violently.
   c). Shift to reverse.
   d). Sound horn and flash lights.

10. An objective of the controlled braking exercise is to:

    a). Develop vehicle control under stress.
    b). Check reactions to the brake.
    c). Practice skidding.
    d). All of the above.

11. The best way to avoid being faced with a crash is to:

    a). Let the other driver go first.
    b). Have your hand ready to sound the horn.
    c). Apply the IPDE concept all the time as you drive.
    d). Keep your brake covered.

12. Which of the following would be the best action if you are in the middle of the intersection and you see a driver on your right running a red light?

    a). Jam on brake.
    b). Steer left.
    c). Accelerate.
    d). Sound horn.

13. You are travelling at 55 MPH on the freeway in moderate to heavy traffic and suddenly the car ahead of you jams on his brakes to avoid hitting the car ahead. You are all in the right-hand lane. You are not fully aware of whether there are cars on your left or not. Which would be your best action if you judge you may not be able to keep from hitting the car in front of you?

    a). Controlled braking.
    b). Steer left.
    c). Steer right.
    d). Hold steady and brake hard.

14. When an accident is inevitable and you have no way of avoiding it, which of the following should be your first choice?

    a). Hit oncoming car.
    b). Hit solid object.
    c). Side swipe a car going your direction.
    d). Rear-end a car going your direction.

15. On a narrow, two-lane street with car parked on both sides and many oncoming cars which of the following would be your best reaction if a car door suddenly opened only two car lengths in front of you? (Your speed is 30 MPH)

    a). Brake hard and hold straight.
    b). Steer right.
    c). Steer left.
    d). Signal for stop and blow horn.

June, 1979

MODULE 9: APPLICATION OF TASKS TO CITY AND FREEWAY ENVIRONMENTS

(Page 1 of 2 pages)

OBJECTIVE

WHEN PRESENTED WITH A SERIES OF OBJECTIVE QUESTIONS RELATING TO APPLICATION OF DRIVING TASKS TO CITY AND FREEWAY ENVIRONMENTS, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

IN THE T.S.E. CAR, IN A LARGE CITY BUSINESS AREA ENVIRONMENT WITH MODERATE TO HEAVY TRAFFIC, THE STUDENT WILL DEMONSTRATE CORRECT PROCEDURES FOR SPEED AND STEERING CONTROL, RIGHT AND LEFT TURNS, LANE POSITION AND SELECTION, INTERSECTING, MAINTAINING A SPACE CUSHION, LANE CHANGES, AND PASSING ON MULTIPLE-LANE STREETS WHILE APPLYING HUMAN FUNCTIONS, COMPLYING WITH RULES OF THE ROAD, AND OBSERVING AND COMPLYING WITH SIGNS, SIGNALS, AND PAVEMENT MARKINGS IN A VARIETY OF SITUATIONS INCLUDING AT LEAST MULTIPLE-LANE TWO WAY AND ONE WAY STREETS AND COMPLEX INTERSECTIONS.

IN THE T.S.E. CAR, THE STUDENT WILL DEMONSTRATE CORRECT PROCEDURES FOR SPEED AND STEERING CONTROL, MERGING AND DIVERGING, LANE POSITION AND SELECTION, LANE CHANGES, AND PASSING IN A FREEWAY ENVIRONMENT.

CONCEPTS

Application of the various driving tasks to a city environment in moderate to heavy traffic and to a freeway environment.

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ______________, pp. __________.
2. Independently read pamphlets: "Freeway Driving Demands Special Skills," "Practical Driving Tips," "Freeway Driving"--Washington State Patrol.
3. Independently complete Worksheets W9a, b, and c.
4. In small groups of 2-4, compare answers on Worksheets W9a, b, and c. Wherever you cannot agree on your answers, consult with the teacher.
5. In a classroom or small group setting, participate in a teacher-led discussion on driving in city and freeway environments, using Overhead Transparency Set T9a for part of the discussion.
6. During in-car instruction, practice application of the various driving tasks to city and freeway environments.

EVALUATION

1. Complete Evaluation E9.
2. In the TSE car demonstrate correct procedures while applying human functions for the following:
   a). While in a large city business area environment with moderate to heavy traffic in a variety of situations including at least multiple lane two way and one way streets and complex intersections: make no more than two errors in speed and steering control; than four errors in making right and left turns; than three errors in maintaining a space cushion; than three errors in lane position and selection; than two errors in complying with rules of the road; than three errors in observing and complying with signs, signals and pavement markings; than three errors in making lane changes; than three errors in negotiating intersections straight through; than three errors passing on the left and three errors passing on the right on multiple-lane streets.

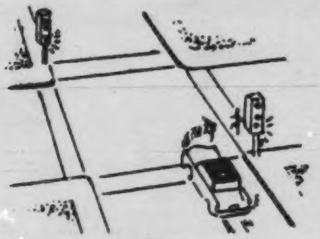
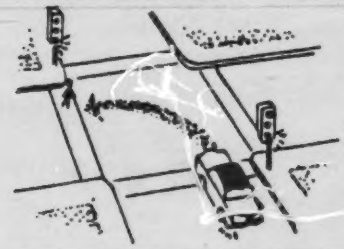
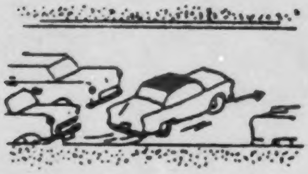
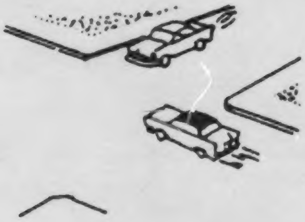
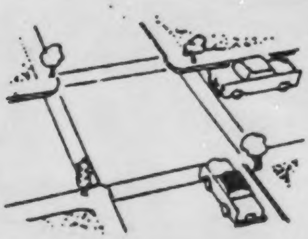
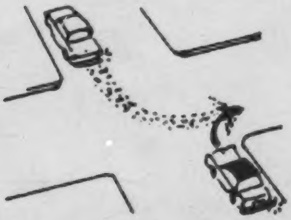
While performing the tasks on the preceding page, there should be a minimum of:
(1) four times when the teacher directs the student to select the best lane to travel in.
(2) twice when the student should negotiate a busy intersection straight through from a stop sign.
(3) twice when the student should decide on his/her own to make a right turn on red and twice a left turn on red, once from a two way street and once from a one way street.
(4) four times when the student passes on the right on multiple-lane streets.
(Note: Only these minimums are spelled out because they could be overlooked. All the other tasks, e.g., left and right turns, negotiating intersections with traffic controls, etc., will happen many times if the evaluation covers 10 minutes. The criteria for determining correct procedures and application of human functions will be those listed for each task in the "________________ School District Driving Task Procedures and Criteria.")

b). In a freeway environment demonstrate correct procedures while applying human functions for the following:
(1) merging, 2 out of 3 times on different entrances.
(2) diverging, 2 out of 3 times on different exits.
(3) lane changing, 2 out of 3 times each to the right and to the left.
(4) passing, 2 out of 3 times.
(5) maintain speed and steering control with no more than two errors and lane position and selection with no more than two errors for the duration of the evaluation of #'s (1) through (4).

WORKSHEET (W9a)
(Page 1 of 2 pages)

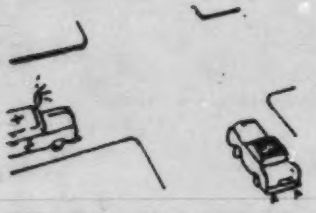
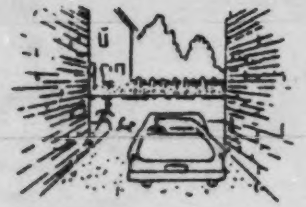
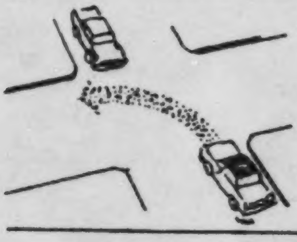
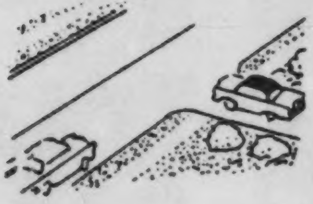
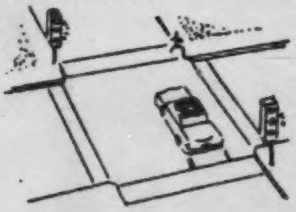
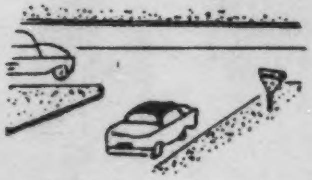
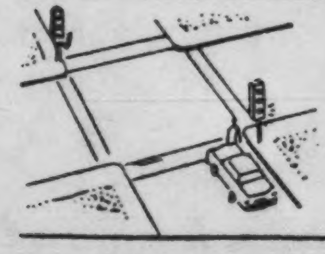
June, 1979

Directions: For each of the following situations, write who must yield the right-of-way. (You are always the driver of the car with the black top.) Give reasons for your decisions.

Situation	Who must YIELD	Reason
 a. You turn *right* with the green light. A pedestrian is starting across the street onto which you are turning. He also has the green light.		
 b. You turn *left* with the green light. A pedestrian is starting across the street into which you are turning. He also has the green light.		
 c. You start to drive out of a parking place. A car is coming in the near lane.		
 d. You arrive first at an unmarked intersection. Another car then arrives on your right.		
 e. You arrive at a four-way stop. Another car arrives on your right at the same time.		
 f. You signal a right turn. A driver facing you signals a left turn into the traffic lane you intend to enter.		

WORKSHEET (W9a)
(Page 2 of 2 pages)

June, 1979

Situation	Who Must YIELD	Reason
 g. You hear the siren of an ambulance.		
 h. You are coming from an alley to a street. A pedestrain walks across the alley.		
 i. You signal a left turn; a car is approaching from the opposite side of the intersection (equal distance away from it).		
 j. You are driving from your own driveway. A car approaches on the street you are about to enter.		
 k. You have progressed into an intersection on the green light. It turns yellow. A pedestrian starts across.		
 l. You approach an intersection and see a YIELD sign. A vehicle approaches from your left.		
 m. You have the green light; a man carrying a white can is crossing against the light.		

June, 1979

WORKSHEET (W9b)
(Page 1 of 3 pages)

1. a) You are going to use the entrance to the freeway pictured below. On the lines in front of the statements below, write the number of the position shown in the diagram at which you would perform that action.

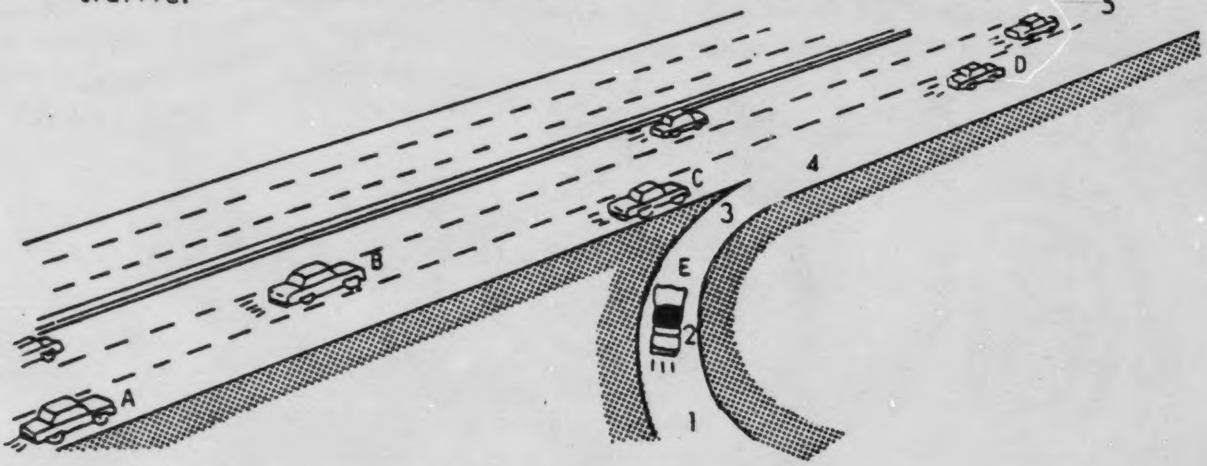
_____Look ahead, glance over left shoulder and see if you have correctly timed entrance into gap.

_____Watch your gap move and time your entrance to meet it.

_____Take quick glances at expressway traffic to pick gap to enter when you reach the expressway.

_____Use acceleration lane to accelerate to expressway speed.

_____Enter expressway at or near expressway speed and use your gap to merge with traffic.



b) If you were driving Car E, do you expect your gap to enter the freeway will come (the cars are identified by the letters in front of them):

1) Between C & D? ____Yes ____No
Explain why or why not:

2) Between B & C? ____Yes ____No
Explain why or why not:

3) Between A & C? ____Yes ____No
Explain why or why not:

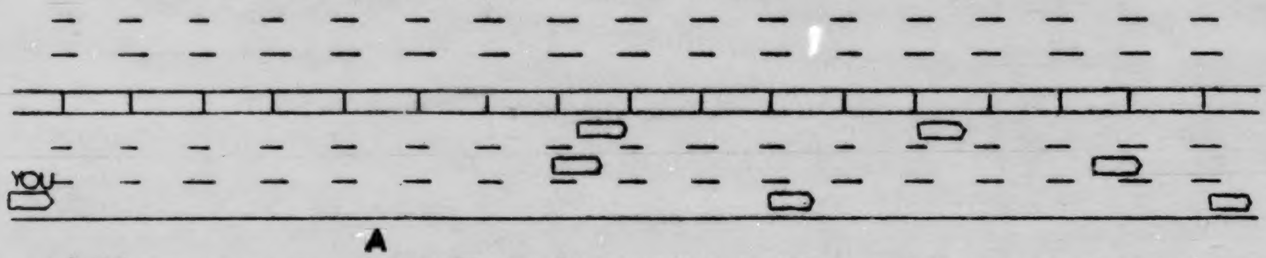
4) After A? ____Yes ____No
Explain why or why not:

WORKSHEET (W9b)

(Page 2 of 3 pages)

June, 1979

2. You are the driver of the car on the far left. At point "A" there is a sign which reads: "LAKE CITY--NEXT FIVE EXITS," followed closely by a sign which reads "EXIT 162, 1st AVE, 1 MILE;EXIT 164,16th AVE, 2½ MILES."



a) If you are not getting off the freeway in Lake City, which lane should you choose to travel in? Why?

b) If you will be using the first or second exit, should you stay in the lane you are in now? Why?

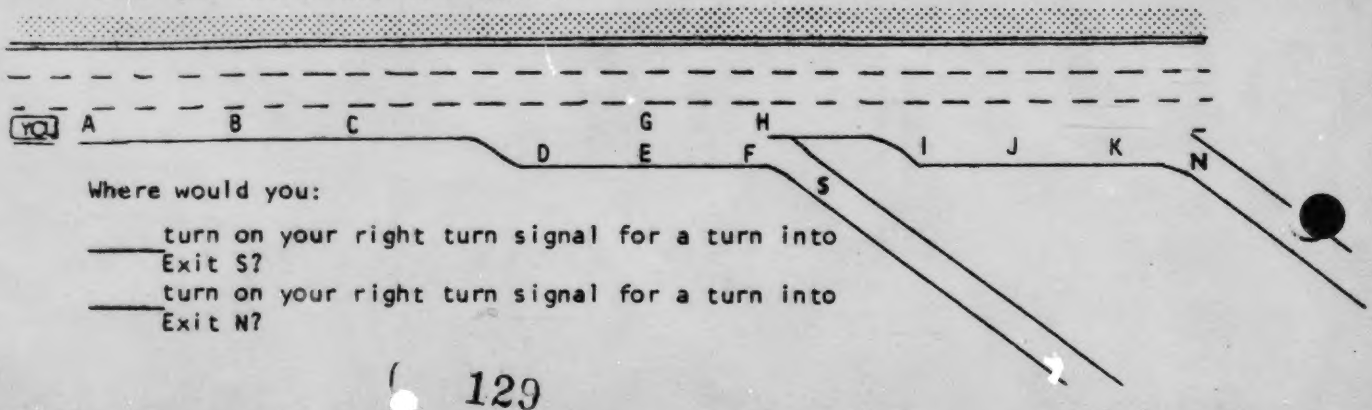
c) If you will be using any of the 3rd, 4th, or 5th exits, which lane should you travel in at this point? Why?

d) If you are travelling about 55 MPH and the "pack" of six cars ahead is travelling about 50 MPH, what action should you take? Why?

e) If the speeds were the same as in d) and the two cars in the lane next to the divider moved into the center lane, what would you do? Why?

f) Under what circumstances would you use the lane next to the divider?

3. On the lines in front of each of the actions, write the letter of the position at which you would take that action.



Where would you:

_____ turn on your right turn signal for a turn into Exit S?

_____ turn on your right turn signal for a turn into Exit N?

WORKSHEET (W9b)
(Page 3 of 3 pages)

June, 1979

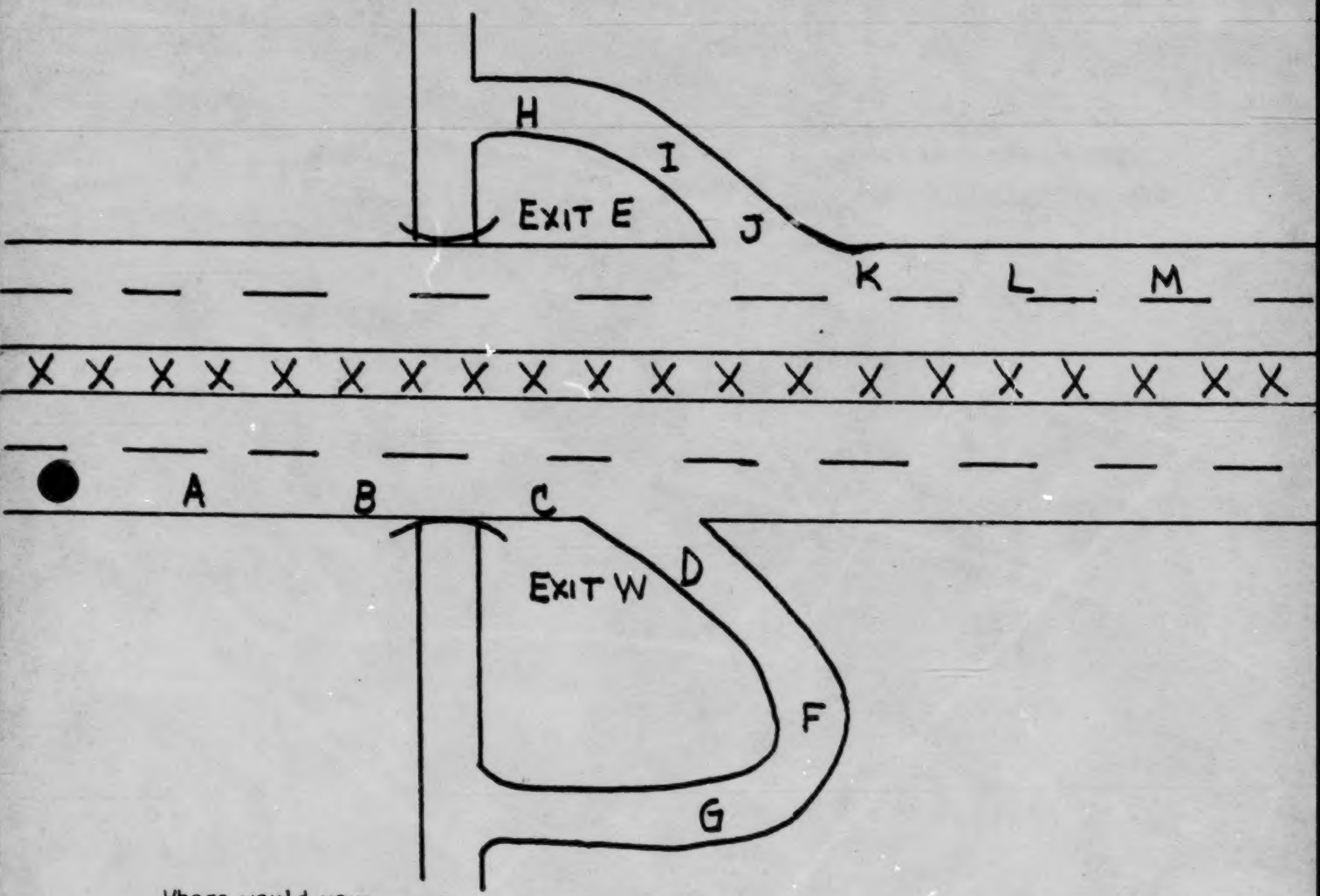
_____enter the deceleration lane for Exit S?

_____enter the deceleration lane for Exit N?

_____begin to decelerate for Exit S?

_____begin to decelerate for Exit N?

_____be slowed to the posted ramp speed for Exit S?



Where would you:

_____turn on your right turn signal for Exit E?

_____... for Exit W?

_____begin to decelerate for Exit E?

_____... for Exit W?

_____be slowed to the posted ramp speed for Exit E?

_____... for Exit W?

June, 1979

WORKSHEET (W9c)
(Page 1 of 4 pages)

Directions: Using the diagram of the "Diamond" freeway interchange on Page 3 of this Worksheet, answer the following questions by placing an "X"" on the line in front of the correct answer.

1. Your car is northbound at Point 1. You must pass point 14 to go west.

____A. True ____B. False

2. Your car is northbound at point 1. To go west you must pass points 16, 8, and 11.

____A. True ____B. False

3. Your car is northbound at point 1, to go east you must pass points 7, 13, and 6.

____A. True ____B. False

4. Your car is southbound at point 2. To go west you must pass points 17 and 11.

____A. True ____B. False

5. Points 9, 19, 10 and 20 are known as acceleration lanes.

____A. True ____B. False

6. Your car is westbound at point 15, to go north you must:

____A. Pass points 21, 11, and 17.
____B. Pass points 22, 14, 9, and 16.
____C. Back up to point 6.
____D. Forget it, you missed your exit.

7. Your car is northbound at point 16. To go west you must turn:

____A. Right at point 7. ____B. Left at point 8.

8. You are going east at point 4. You are about to pass through:

____A. A tunnel
____B. A grade separation.
____C. An off-ramp.
____D. A deceleration lane.

9. You are southbound at point 24. To go east you must pass through points.

____A. 10, 12, and 23. ____B. 9, 14, and 22.

10. Your car is passing point 14 in a southerly direction. To go north, you must turn left at point 9. To go south you must pass point 19.

____A. True ____B. False

June, 1979

WORKSHEET (W9c)
(Page 2 of 4 pages)

Directions: Using the diagram of the "Trumpet" freeway interchange on Page 4 of this Worksheet, answer the following questions by placing an "X" on the line in front of the correct answer.

1. Your car is northbound at point 1. To go east you must pass points:

____A. 10 and 9. ____B. 4, 13, 14 and 2.

2. Your car is northbound at point 1. To go west you must pass points 4 and 12.

____A. True ____B. False

3. If your car was westbound at point 5 you would be going the wrong way.

____A. Yes ____B. No

4. It is legal to back up from point 7 if you missed your exit at point 14.

____A. Yes ____B. No

5. Your car is westbound at point 2. To go south you must pass points:

____A. 16, 15, 11, and 8. ____C. 7, 2 and 4.
____B. 14, 13, and 3. ____D. 7 and 16.

6. From point 5 you can only go east or south safely and legally.

____A. Yes ____B. No

7. A southbound car at point 3 has how many choices of direction to travel?

____A. None ____C. Two
____B. One ____D. Three

8. Point 10 is known as a:

____A. Merging lane ____C. Ramp
____B. Accelerator ____D. None of these.

9. Points 9 and 14 are the same type of lanes.

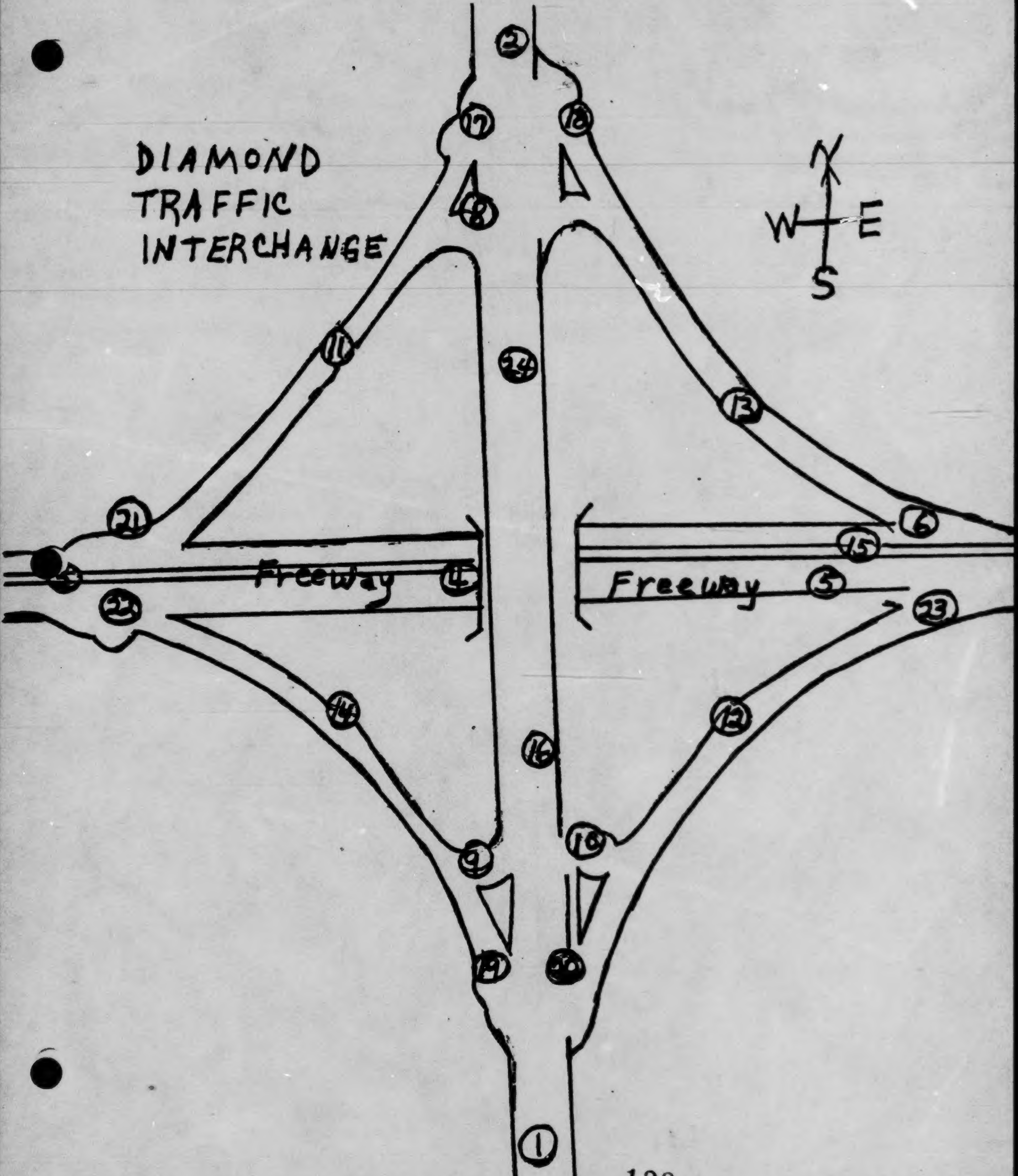
____A. Yes ____B. No

10. At point 12 you must always stop.

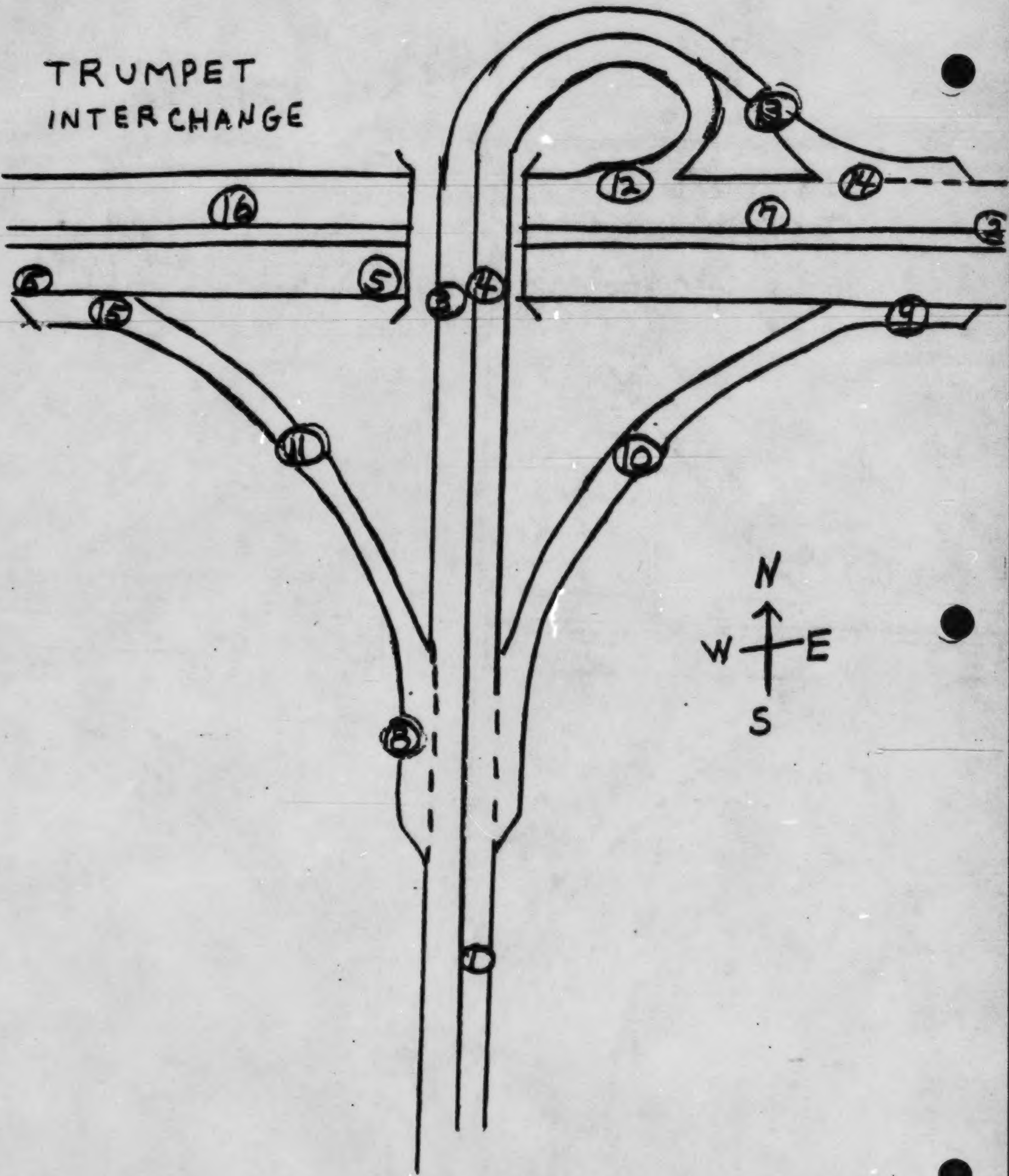
____A. Yes ____B. No

WORKSHEET (W9c)
(Page 3 of 4 pages)

June, 1979


DIAMOND
TRAFFIC
INTERCHANGE
N
W
E
S
2
17
18
8
11
24
13
21
6
15
3
Freeway
4
Freeway
5
22
23
14
12
16
9
10
19
20
1

TRUMPET INTERCHANGE


13
14
12
16
7
2
6
5
3
4
15
9
11
10
N
W
E
S
8
1

June, 1979

TEACHER-LED DISCUSSION
(Student Learning Activity #5, Module 9)
(Page 1 of 2 pages)

Directions: Inform the students of the points in Part A. Ask the students the questions in Part B. Some questions will be accompanied by Overhead Transparencies, Set T9a.

A. 1. "Heavy" city driving differs from "other" driving because there is a greater congestion of vehicles, more noise and confusion, (more) traffic control devices, and many pedestrians.

2. Application of human functions, IPDE, becomes ever more important.

3. The basic meaning of traffic lights is red means stop, yellow or amber warns that the light is turning red, and green means you can go--BUT--there is more to it than that for yellow and green. Yellow or amber means: Clear the intersection as soon as possible, do not enter the intersection; green means go ONLY if it's safe and that means that the driver should check left and right (quickly) before entering the intersection to be sure all cars are heeding the red light and stopping.

3. In heavy city traffic,you may not be able to separate hazards to one at a time or may have no room to compromise distance from a hazard. You will need to strike a medium between keeping to the minimum (compromising risks) the number of hazards you must encounter at the same time and keeping up with the traffic flow. And that takes work and constant attention.

4. Occasionally there are entrances from the left onto exits to the left off of free ways. The procedures are basically the same for using these except for the direction of vision checks and attention to the fact that you will be entering and exiting in the "passing" lane unless a new lane starts with the entry ramp or ends with the exit.

B. 1.a. What is probably the best lane of travel on a 3-lane one-way street?

Answer: Middle lane.

b. Why?

Possible Answer: It affords the best vision; it provides the greatest continuous traffic flow.

c. What could change that?

Possible Answer: Need to make right or left turn within a short distance.

2.a. What is a stale green light?

Possible Answers: One that has been green for some time; one where the "don't walk" light is flashing or on steady.

b. What should be your action when you observe a stale green light?

Possible answer: Expect the light to turn amber and therefore, be prepared to stop.

3. If you hear or see an emergency vehicle and you are in heavy traffic and there seems to be no room "to pull off to the side," what should you do?

Answer: Stop where you are--with qualifications.

4. Transparency #1, T9a. a) What particular hazard do you as the driver of Car A need to be on the lookout for?

Possible Answer: Drivers, trapped in the left lane and wanting to go straight, changing quickly into the right lane.

TEACHER-LED DISCUSSION
SLA 5, Module 9
(Page 2 of 2 pages)

b) What should you be prepared to do?

Possible Answers: Ready to blow horn, ready to apply brake quickly, slow down.

5. What should you be looking for to determine whether a street is a one-way street? And where?

Possible Answers: One-way signs, located on sign and signal control posts (usually stop signs and signal lights or posts located near the corner of the intersection; the way signs are facing; pavement markings (white dividers); the way parked cars are facing; traffic in all lanes going the same direction.

6. (Ask the following questions for each transparency). (1) If you are travelling straight through for some distance which lane would you chose? (2) Making a right turn within six blocks? (3) Making a left turn within six blocks? Justify each answer.

a. Transparency #2, T9a

Possible Answers #2: (1) Inside lane--safe lane, buildings block view of cross streets, booby traps right beside right lane because of left turn lanes there is little interference with traffic flow; (2) Right lane--with heavy traffic it may be difficult to get over in time; (3) Inside lane--for all the same reasons above.

b. Transparency #3, T9a.

Possible Answers #3: (1) Inside lane, if there are few cars making left turns--safe lane again because of visibility; right lane, if left turning traffic tends to hold up traffic flow in the inside lane--a compromise between the "safer lane" and being caught in congestion (Remind the students that travel in the right lane puts them often in the situation shown in T9a, #1); (2) Right lane--for second reason in #1, and may not be able to get over in time from the lane in moderate to heavy traffic; (3) Inside lane--may not be able to get over in time from the right lane in moderate to heavy traffic.

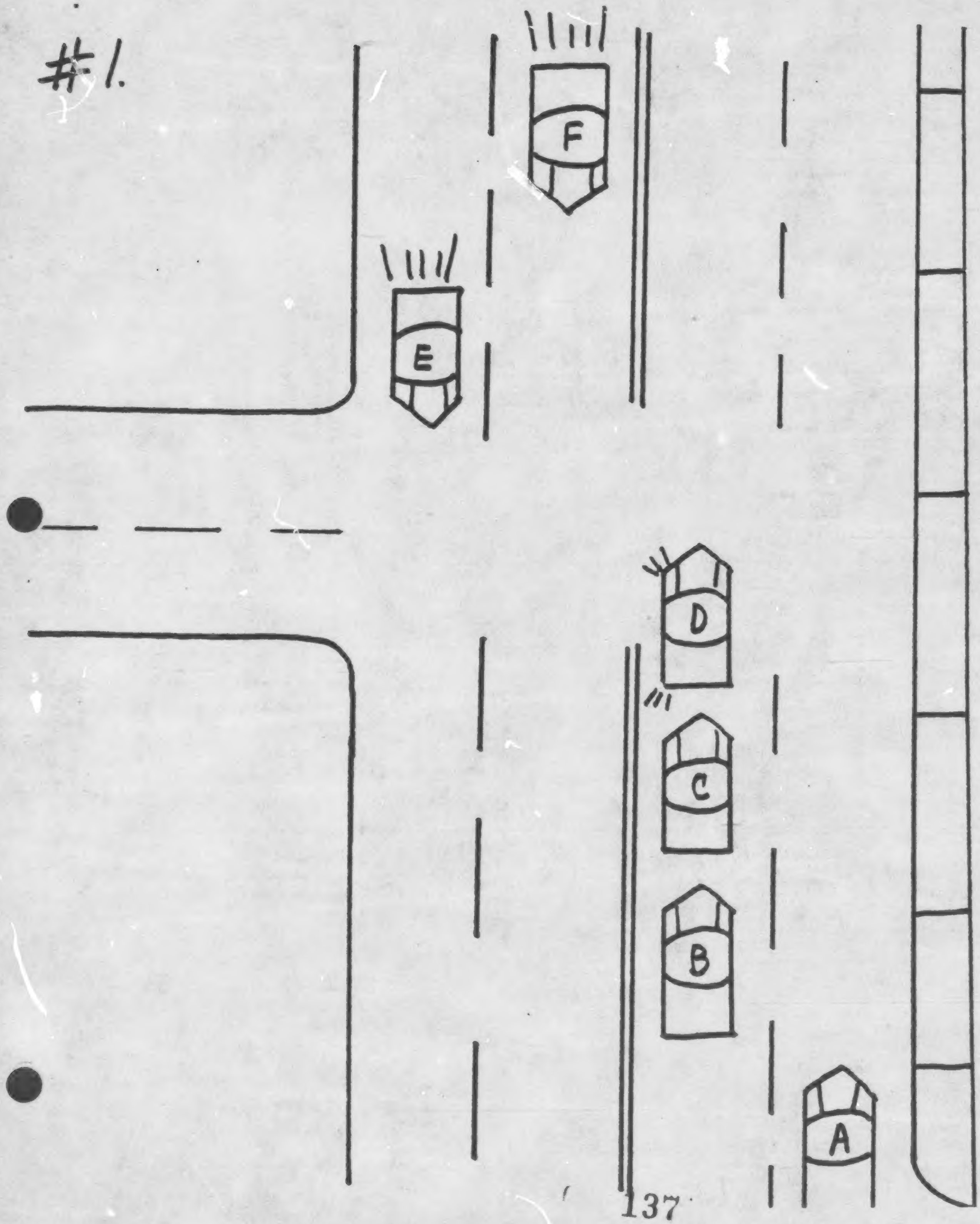
c. Transparency #4, T9a.

Possible Answers #4: (1) Right lane usually--best to use right lane except to pass, visibility is good because buildings are back from the street, traffic flow should be better in right lane; (2) Right lane--same reason as in #1 and same reason as given before for being prepared for turn; (3) Inside lane--as before, may be hard to get into left lane at the last minute if traffic is moderate to heavy.

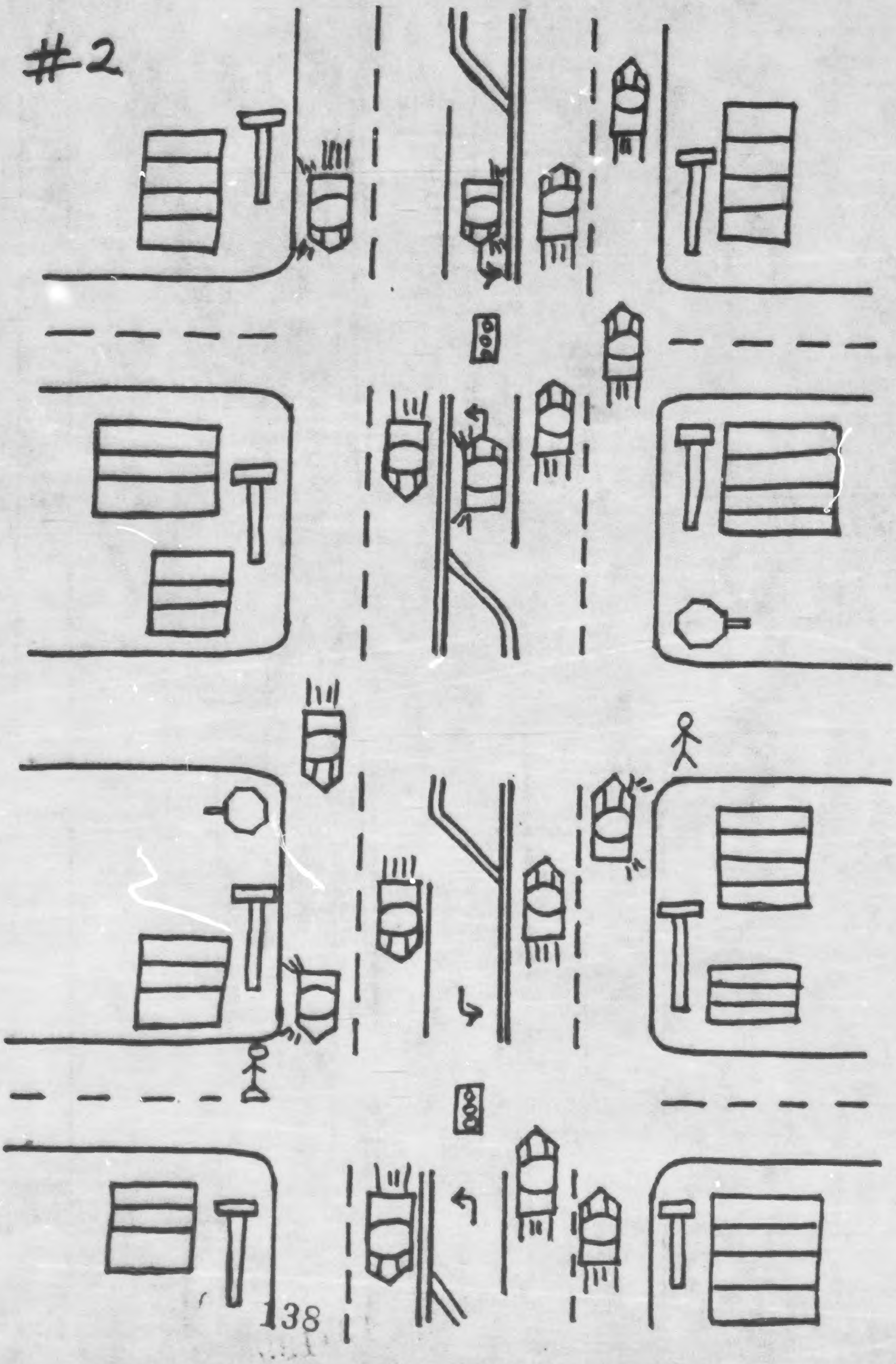
Note--Inform the students that there are literally thousands of situations that could be put on transparencies and these questions and other questions discussed. It is hoped that the principles and ideas used here will carry over into decisions they will have to make in the many other situations.

TRANSPARENCY SET T9a
(Page 1 of 4 pages)

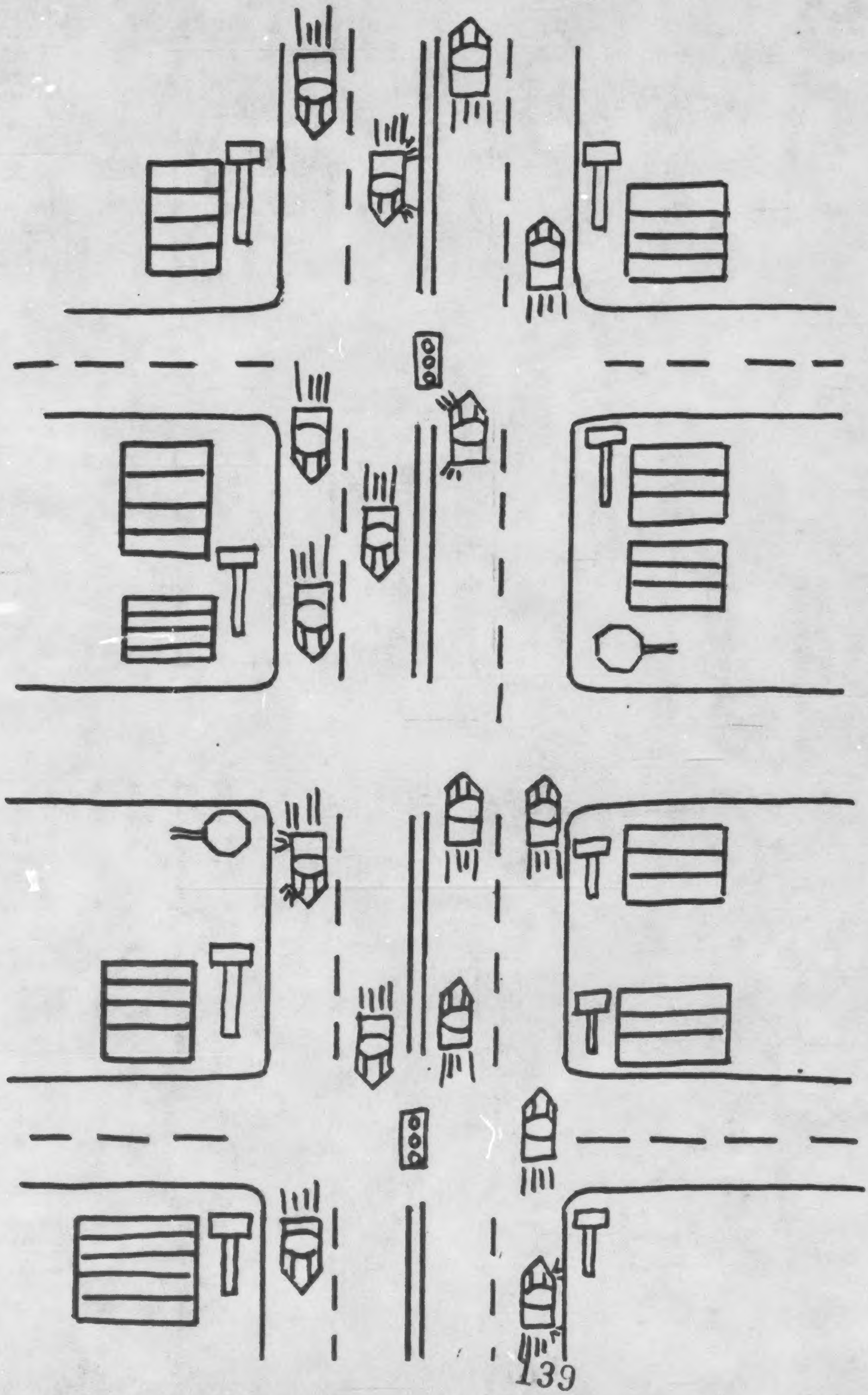
#1.



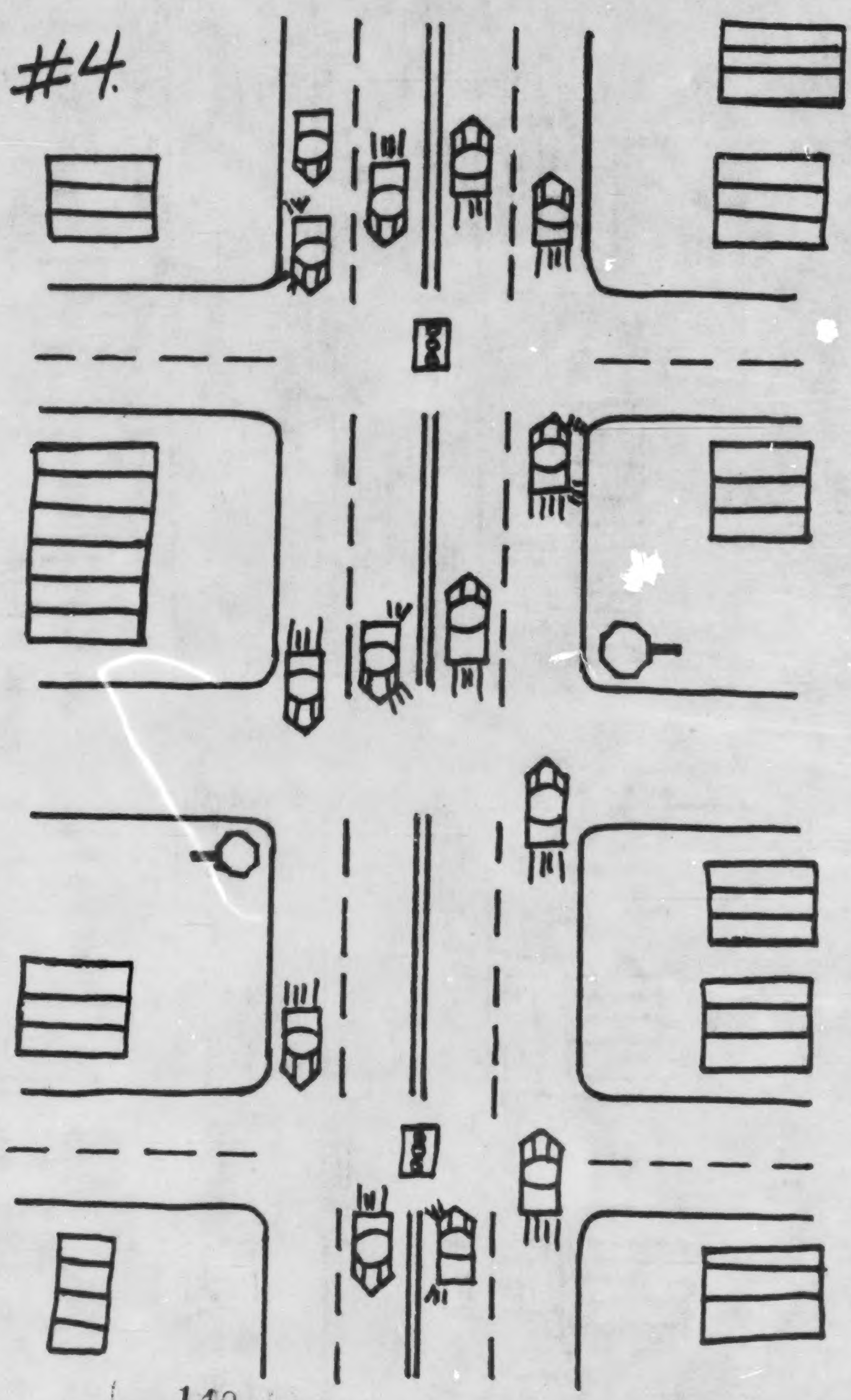
#2



#3.



#4.



June, 1979

EVALUATION: E9a
(Page 1 of 2 pages)

Directions: Write the letter of the correct answer next to the corresponding number on the answer sheet. A total of 12 points is needed to pass.

(Each question is worth one point)

1. The best way to approach a light that has been green for some time is to:
   a). Expect it to stay green.
   b). Expect it to change.
   c). Speed up and hurry through.
   d). Slow way down.

2. You are travelling in the right lane of a 4-lane city street approaching an intersection with a green light. There is a long line of stopped cars in the left lane. What particular hazard should you be prepared for?
   a). No particular hazard.
   b). Cars in the left lane may not be able to stop in time.
   c). Cars in the left lane wishing to go straight may jump to the right lane.
   d). Cross street traffic running the red light.

3. In heavy two-lane city traffic, it is best to:
   a). Drive at the speed of other traffic.
   b). Pass other cars if they are going slow.
   c). Drive to the far right of your lane.
   d). Drive more slowly than usual.

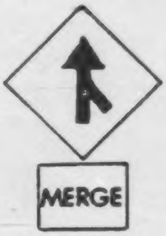
4. When there are three traffic lanes moving in the same direction on a surfaced street, the center lane is usually the one chosen by the more efficient drivers because:
   a). It is legal to exceed the speed limit.
   b). It allows driver to be prepared to get in right or left lane quickly for a turn.
   c). It provides the greatest continuous traffic flow.
   d). It has the right-of-way over other lanes.

5. A broken white line down the center of a two-lane street means:
   a). Two way street.
   b). Left turns across the line permitted.
   c). It is not an arterial street.
   d). One way street.

6. Generally it is not necessary to yield the right-of-way to:
   a). Vehicles already in the intersection.
   b). Pedestrians in an unmarked crosswalk.
   c). Oncoming vehicles with left turn signals on.
   d). Vehicles to the right in an uncontrolled intersection.

7. When you hear and/or see an emergency vehicle, you should:
   a). Go faster to get out of its way.
   b). Stop where you are.
   c). Pull to the side of the road and stop.
   d). Keep moving at your regular speed.

8. Seeing this sign while travelling on the freeway indicates you should:
   a). Change lanes.
   b). Change speeds.
   c). Be alert to traffic from the right.
   d). Possibly any or all of the above.



9. You are driving in the center lane of an expressway. Suddenly you see you are passing the exit you were looking for. Which action should you take?

   a). Move to the right shoulder and back up to your exit.
   b). Signal, brake, let traffic go by and then turn off to the exit.
   c). Make a left turn across the next median opening.
   d). Continue on to the next exit.

10. What do experts say is the most frequent cause of crashes on expressways?

   a). Loss of control.
   b). Following too closely.
   c). Straddling lanes.
   d). Changing lanes.

11. After passing on the expressway, when should you return to the right lane?

   a). When the passed car has enough following distance.
   b). Four seconds in front of the passed car.
   c). When you see both headlights of the passed car in your rearview mirror.
   d). When you are 15-car lengths ahead.

12. Which action is best when preparing to leave an expressway on the right deceleration lane?

   a). Brake to posted ramp speed on freeway.
   b). Keep minimum expressway speed until on exit ramp.
   c). Increase speed as you enter the ramp.
   d). Maintain freeway speed on the exit ramp.

13. Being velocitized results from which of these?

   a). Boredom.
   b). Hypnosis.
   c). Speed.
   d). Drowsiness.

MODULE 10: OBTAINING YOUR DRIVER'S LICENSE

OBJECTIVE WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS ON THE CONTENT OF THE DRIVER'S GUIDE OF THE STATE OF WASHINGTON, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

IN THE T.S.E. CAR, THE STUDENT WILL PASS THE ROAD TEST WITH A SCORE OF 80.

CONCEPTS Driver's license tests.

STUDENT LEARNING ACTIVITIES

1. Independently read the "Driver's Guide" for the State of Washington.
2. Independently read, "A Driver License--Your Key to the Road." On a separate sheet of paper, answer the questions asked throughout the booklet and compare answers with one or two other students in the class.
3. Independently read and study the criteria for Evaluation: Road Test Module 10 as found in "________________ School District Driving Task Procedures and Criteria."
4. Participate in a classroom group session presented by a representative from the Department of Licensing.

EVALUATION

1. Complete Evaluation E10.
2. Complete the road test.

Directions
(Student Learning Activity 4, Module 10)
(One Page Only)

The following is an outline of the points to ask the representative of the Department of Licensing to make. This outline should be discussed enough in advance of the presentation so the speaker has time to prepare. (This presentation should be limited to a maximum of 30 minutes.) The speaker should be directed to leave enough time for questions from the class, and clarify if he/she wants questions during or at the end of the presentation.

1. Test requirements for an individual getting a new license in Washington State--kind of tests, how each will be administered, scores required for passing.
2. Procedures necessary for an individual to follow to arrange for testing.
3. Necessary items to bring when going to take the various tests.
4. What will be checked and what will the student be required to demonstrate in the road test. Specific tips for the students about the road test.
5. Most common items that cause students to fail the written and drive tests.
6. What the student can or should do if he/she happens to fail a test.

EVALUATION E10a
(Page 1 of 4 pages)

Directions: Write the letters of the correct answers on the separate answer sheet. A total of 20 points is needed to pass.

1. An instruction permit for learning how to drive a motor vehicle may be issued to:
   a). Only those enrolled or about to be enrolled in Driver Education.
   b). Those who are at least 15½ years of age.
   c). Those who are at least 15 years of age if they are going to be enrolled in Driver Education within a month.
   d). Only those enrolled in Driver Education or who are at least 18 years of age.

2. The maximum speed limit on county roads unless otherwise posted is:
   a). 45 MPH
   b). 40 MPH
   c). 55 MPH
   d). 50 MPH

3. If a person refuses to submit to a blood-alcohol content test the "implied consent" law:
   a). The driver will automatically be convicted of DWI.
   b). His or her license will be suspended for 90 days.
   c). His or her license must be revoked for six months.
   d). The driver will be presumed to have a blood-alcohol content of at least 0.10%.

4. Every vehicle which operates on the roadways must be equipped with:
   a). A horn that can be heard for a distance of 200 feet.
   b). A side view mirror mounted in such a manner as to provide a reflected view to the driver of 200 feet.
   c). At least one windshield wiper.
   d). Side windows for the front seat which can be rolled up and down.

5. Front seat belts are required on motor vehicles manufactured after:
   a). January, 1954.
   b). January, 1960.
   c). January, 1939.
   d). January, 1964.

6. No persons shall park a car closer than:
   a). Fifteen feet from a private driveway.
   b). Twenty feet from a crosswalk at an intersection.
   c). Thirty feet from the driveway of a fire station.
   d). All of the above.

7. Persons driving a motor vehicle on the public roads in the State of Washington:
   a). Must have a Washington State Driver's License or Instruction Permit.
   b). Must have a valid driver's license or Washington State Instruction Permit in his or her possession.
   c). May use another state's license until it expires.
   d). May drive on an Instruction Permit as long as they have any Washington licensed driver with them.

May, 1979

EVALUATION E10a
(Page 2 of 4 pages)

8. Applicants for Washington Driver Licenses must meet the following:
   - a). Pay an examination fee before taking the test.
   - b). Demonstrate normal hearing ability.
   - c). Provide a vehicle for the road test.
   - d). All of the above.

9. During the road test:
   - a). Arm signals must be used.
   - b). Electric turn signals may be used.
   - c). Only passengers approved by the examiner may be in the car during the test.
   - d). You should ask questions if you have any.

10. If the road test is failed, a second test can be taken:
    - a). The same day.
    - b). After 24 hours.
    - c). After at least 3 days.
    - d). After at least one week.

11. Washington State Driver's Licenses:
    - a). Must be renewed every 3 years.
    - b). Expire on the driver's birthday.
    - c). Require a short written exam for each renewal.
    - d). Can be renewed through the mail if there has not been a moving violation during the previous two years.

12. Notice of a change of address must be sent to the Department of Licensing within:
    - a). 10 days.
    - b). 30 days.
    - c). 90 days.
    - d). At the time of renewal of license.

13. Vehicles must obey posted truck speed limits:
    - a). When they are slower than the other vehicles on the road.
    - b). When they are 10,000 lbs. gross weight or more.
    - c). They are 7,500 lbs. gross weight or more.
    - d). Only when in combination, like semi-trucks or cars with trailers.

14. A vehicle must pull off the roadway and allow others to pass:
    - a). When the vehicle is not capable of doing the speed limit.
    - b). When it is classified as a truck and is holding up traffic.
    - c). When travelling slow and five or more vehicles form a line behind.
    - d). When travelling slow and three or more vehicles form a line behind.

15. Overtaking and passing a vehicle on the right is permitted:
    - a). Only between intersections.
    - b). Only on sufficiently wide state highways.
    - c). When the vehicle is making a left turn.
    - d). None of the above.

16. At an uncontrolled intersection:

    a). The vehicle on the right has the right-of-way.
    b). The vehicle on the left has the right-of-way.
    c). When vision is blocked to the left, the vehicle on the left has the right-of-way.
    d). The vehicle reaching the intersection first has the right-of-way.

17. It is legal to exceed the speed limit:

    a). When rushing an emergency victim to the hospital.
    b). When passing on a two lane roadway.
    c). It is never legal.
    d). Both a and b.

18. Drivers must yield to pedestrians when:

    a). They are in marked crosswalks and at all intersections not controlled with signal lights.
    b). At all times.
    c). When pedestrians are walking facing traffic.
    d). Both a and c.

19. Parking on the shoulder of the freeway is legal only:

    a). If the driver parks at least ten feet from the nearest lane edge.
    b). To change drivers.
    c). In case of emergencies.
    d). It is never legal.

20. Lights must be on:

    a). On all vehicles traveling on freeways.
    b). From a half hour after sunset to a half hour before sunrise.
    c). From sunset to sunrise.
    d). From a half hour after sunset to one hour before sunrise.

21. The law requires you dim your headlights when following another vehicle within:

    a). 1,000 feet.
    b). 500 feet.
    c). 400 feet.
    d). 300 feet.

22. A driver must stop for a school bus that is loading and unloading passengers:

    a). From both directions on a multiple lane road when the bus has its red flashing lights going.
    b). When the school bus is off the roadway and the drivers are travelling in the same direction.
    c). From both directions on a two-lane roadway when the bus has its red flashing light going.
    d). All of the above.

23. Hitchhiking is illegal:

    a). On freeways
    b). On streets and roads where there is no space for a car to pull off and pick up a hitchhiker.
    c). Both a and b.
    d). Neither a or b.

24. When parking on a downhill, the front wheels should be:

    a). Turned out from the curb if there is a curb and toward the edge of the street if there is no curb.
    b). Turned toward the curb if there is a curb and toward the street if there is no curb.
    c). Turned toward the street whether there is a curb or not.
    d). Turned toward the edge of the street whether there is a curb or not.

25. The financial responsibility law in the State of Washington means:

    a). That drivers must be able to own their own vehicles.
    b). That all vehicle owners must carry liability insurance.
    c). That the driver or owner of a vehicle involved in a collision must show proof of financial ability to satisfy any judgment against him/her as a result of the accident.
    d). Each driver is responsible only for his/her own financial security and not for others.

May, 1975

EVALUATION: Road Test Module 10
(One Page Only)

STUDENT NAME ______________________ DATE __________ SCORE __________

PASS __________ FAIL __________

A score of 80 is needed to pass. Errors are based on Criteria for Evaluation: Road Test Module 10 as found in "______________ School District Driving Task Procedures and Criteria." The total points indicated are deducted in any one category whether the student makes one or more errors in that category. For example if in #3, Starting from a Parked Position, a student fails to signal once, one check mark should be put on the line under errors on danger potential and 4 points should be deducted. If another student fails to signal twice and fails to headcheck once, 3 check marks should be put on the line under errors on danger potential and still only 4 points should be deducted.

	Errors	Points
1. Mechanical Operation		
Danger Potential	______	2 ______
Lack of Skill	______	1 ______
2. Control Position		
Danger Potential	______	2 ______
3. Starting from Parked Position		
Danger Potential	______	4 ______
4. Backing		
Danger Potential	______	4 ______
Lack of Skill	______	2 ______
5. Park & Start on Hill		
Danger Potential	______	4 ______
Lack of Skill	______	2 ______
Congestion Potential	______	1 ______
6. Parallel Parking		
Danger Potential	______	4 ______
Lack of Skill	______	2 ______
Congestion Potential	______	2 ______
7. Right Turns		
Danger Potential	______	4 ______
Lack of Skill	______	2 ______
Congestion Potential	______	2 ______
8. Left Turns		
Danger Potential	______	6 ______
Lack of Skill	______	3 ______
Congestion Potential	______	2 ______
9. Lane Travel		
Danger Potential	______	4 ______
Congestion Potential	______	2 ______
10. Approach to Intersection		
Danger Potential	______	4 ______
11. Right of Way		
Danger Potential	______	4 ______
Congestion Potential	______	2 ______
12. Following		
Danger Potential	______	4 ______
Congestion Potential	______	2 ______
13. Passing		
Danger Potential	______	4 ______
Congestion Potential	______	1 ______

	Errors	Points
14. Stop Signs		
Danger Potential	______	4 ______
Congestion Potential	______	2 ______
15. Traffic Control Devices		
Danger Potential	______	4 ______
16. Traffic Signal Lights		
Danger Potential	______	4 ______
Congestion Potential	______	2 ______
17. Quick Stop		
Danger Potential	______	2 ______
18. General Driving Performance		
Danger Potential	______	4 ______
Congestion Potential	______	2 ______

_____ Not observing and complying without error with all signs, signals and pavement markings--automatic failure of Module 11.

_____ Flagrant violation of law (e.g., speeding 5 or more MPH over limit, failure to obey traffic officer's direction, runs red light)--automatic failure of Module 10.

_____ Accident or near accident caused by student--automatic failure of Module 10.

_____ Flagrant dangerous action--automatic failure of Module 10

Total Points	100
Deductions (Add all the deduct points together)	- ______
SCORE	______

MODULE 11: SIGNS, SIGNALS AND PAVEMENT MARKINGS

OBJECTIVE

WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS ON SIGNS, SIGNALS AND PAVEMENT MARKINGS, THE STUDENT WILL RESPOND WITH 90% ACCURACY.

IN THE T.S.E. CAR, THE STUDENT WILL OBSERVE AND COMPLY WITH ALL SIGNS, SIGNALS AND PAVEMENT MARKINGS.

CONCEPTS

Traffic signs: shapes, colors, symbols.
Traffic signals: colors, flashing signals, arrows, pedestrian.
Pavement markings: kinds, colors.

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ____________________, pp. __________.
2. In a classroom group setting, view:
   a). "Signs & Symbols," (FS,C);
   b). "Markings & Signals," (FS,C).
3. Independently read the pamphlet, New Road Signs Coming Your Way.
4. Independently read pp. 17-24 in the 1975 edition of "The Bicycle Driver's Guide" of the State of Washington.
5. Independently complete Worksheet W11a.

EVALUATION

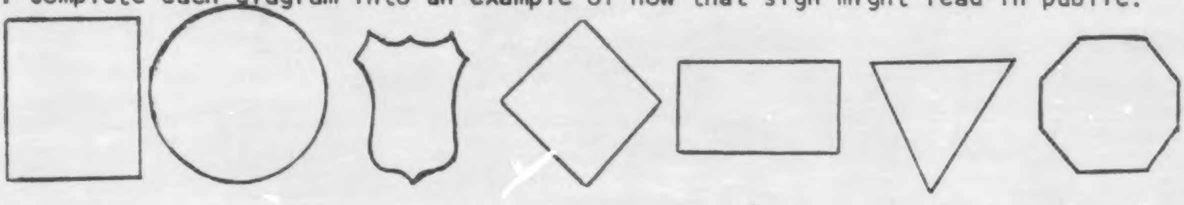
1. Complete Evaluation E11.
2. During the road test in Module 10, observe and comply without error with all signs, signals and pavement markings.

May, 1979

WORKSHEET W11a
(Page 1 of 2 pages)

1. Draw or describe the symbol which prohibits some type of action, for example, "No U Turn."

2. a). On the lines below each of the diagrams, put a (1) if it is a regulatory sign, a (2) for warning, and a (3) for guide or informational.
b). Complete each diagram into an example of how that sign might read in public.



3. What is the meaning of the following colors on traffic signs:

White? ____________________

Red? ____________________

Black? ____________________

Yellow? ____________________

Orange? ____________________

Green? ____________________

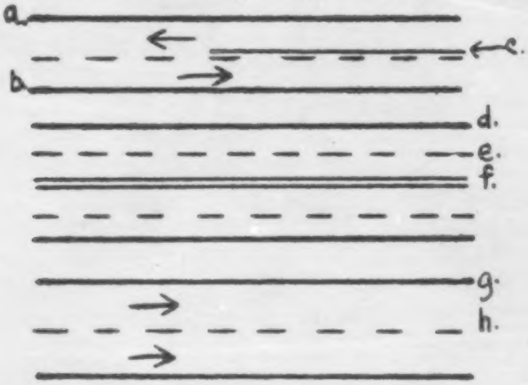
Blue? ____________________

Brown? ____________________

4. What color are stop lines? ____________________

5. What color are crosswalk lines? ____________________

6. In the following diagrams, give the color and purpose of the marking.

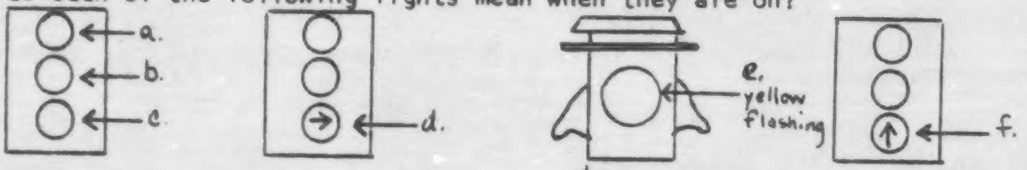


a. color __________ purpose __________
b. color __________ purpose __________
c. color __________ purpose __________
d. color __________ purpose __________
e. color __________ purpose __________
f. color __________ purpose __________
g. color __________ purpose __________
h. color __________ purpose __________

WORKSHEET W11a
(Page 2 of 2 pages)

May, 1979

7. What do each of the following lights mean when they are on?



a. ______________________________

b. ______________________________

c. ______________________________

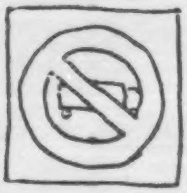
d. ______________________________

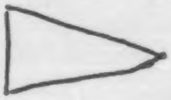
e. ______________________________

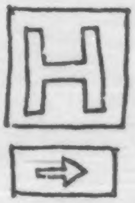
f. ______________________________

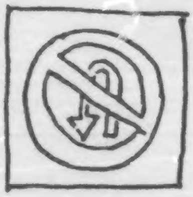
8. Match each of the following traffic signs with its meaning.

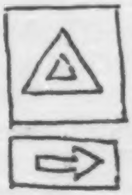
____ 1. Bike Xing
____ 2. No Left Turn
____ 3. Slippery When Wet
____ 4. Divided Highway
____ 5. Merge
____ 6. Parking
____ 7. No Right Turn
____ 8. Yield
____ 9. No Passing Zone
____ 10. School Zone
____ 11. Camping
____ 12. Low Clearance
____ 13. No Trucks
____ 14. Hill
____ 15. Do Not Enter
____ 16. Two-Way Traffic
____ 17. No U-Turn
____ 18. Hospital
____ 19. Signal Ahead

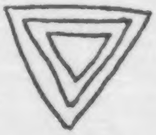

A.

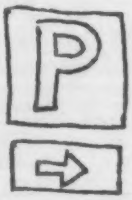

B.

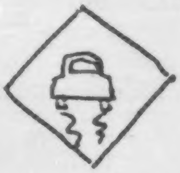

C.

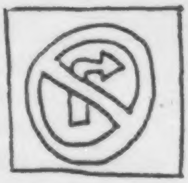

D.

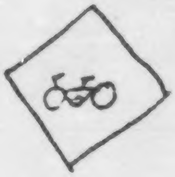

E.

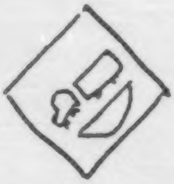

F.

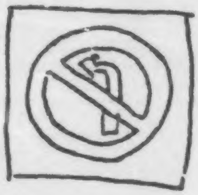

G.

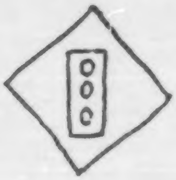

H.

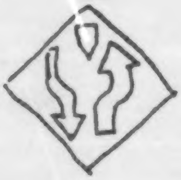

I.

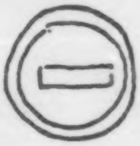

J.

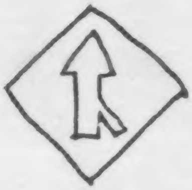

K.

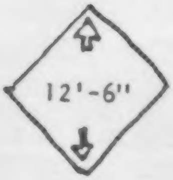

L.


M.

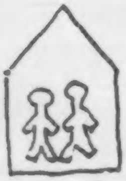

N.

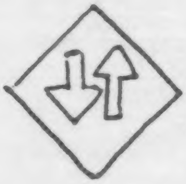

O.


P.



Q.


R.


S.

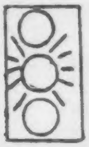
May, 1979

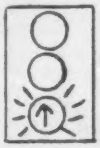
EVALUATION E11a
(Page 1 of 4 pages)

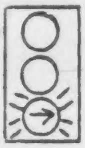
Directions: Write the letters of the correct answers on the separate answer sheet. The third and fourth pages of this test is Test W-1 of Safety Centers Incorporated. 1 through 10 Lower should be answered on #'s 11 through 20 and 1 Upper through 10 Upper should be answered on #'s 21 through 30. A total of 27 points is needed to pass.

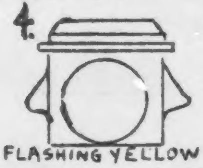
(Each question worth 1 point each)

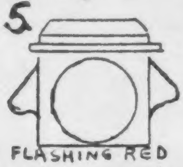
Use the following illustrations for questions 1 through 5:

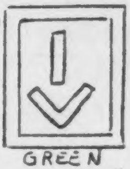
1.


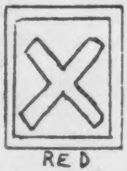
2.


3.


4.

FLASHING YELLOW

5.

FLASHING RED

6.

GREEN

7.

RED

1. When this signal is displayed, you must come to a complete stop before proceeding:

a). 7 b). 5 c). 4 d). 3

2. If this signal is displayed at an intersection, you may only drive straight through.

a). 6 b). 1 c). 2 d). 4

3. This signal informs you to drive through the intersection after slowing and while exercising caution.

a). 4 b). 5 c). 1 d). 7

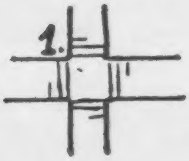
4. When this light is displayed over the lane you are driving in, you may continue travel there.

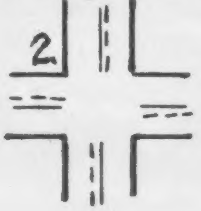
a). 3 b). 1 c). 7 d). 6

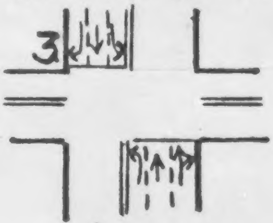
5. When you see this signal displayed at an intersection, you may only turn right.

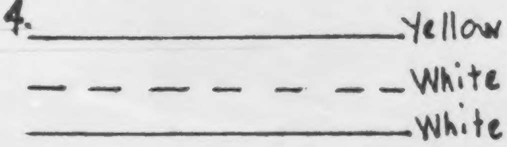
a). 1 b). 2 c). 3 d). 4

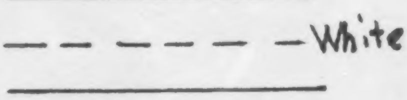
Use the following illustrations for questions 6 through 10:

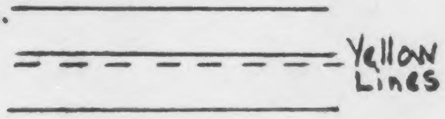
1.


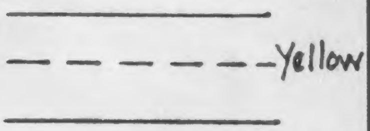
2.


3.


4.


5.


6.


7.


6. A one-way road.

a). 7 b). 6 c). 5 d). None are one way.

7. A one-way road with inadequate space for parking to the left.

a). 6 b). 5 c). 4 d). None are one way.

8. Intersecting roadways which have only longitudinal traffic lane markings.

a). 1 b). 2 c). 3 d). None fit that description.

9. An intersection where there are turn restrictions.

a). 1 b). 2 c). 3 d). None fit that description.

10. A two-way roadway where passing is permitted only one way.

a). 4 b). 5 c). 6 d). 7

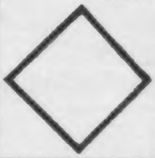
EVALUATION E11a
(Page 3 of 4 pages)

NAME ____________________
CLASS ____________________
DATE __________ SCORE _____

W/1 LOWER

SAFETY CENTERS INC. SAFETY THROUGH PROGRAMMED LEARNING
BOX 2223 PAWTUCKET, R.I. 02861

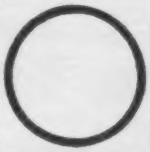
PROBLEM 1 LOWER
The diamond shaped sign pictured here may have a yellow or orange background and serves as a:



ANSWER 1L Frame #17
A. Speed limit marker.
B. General information sign.
C. Warning of hazards on or near the highway.
D. Curve marker.

1L ☐ A ☐ B ☐ C ☐ D

PROBLEM 2 LOWER
A yellow circle warns of a railroad crossing, and is usually posted before the crossing a distance of:



ANSWER 2L Frame #18
A. 100 feet.
B. 50 yards.
C. 100 yards.
D. 50 feet.

2L ☐ A ☐ B ☐ C ☐ D

PROBLEM 3 LOWER
The three major classifications into which traffic signs are grouped are called regulatory, warning, and:

ANSWER 3L Frame #23
A. Guide.
B. Restrictive.
C. Hazard.
D. Route markers.

3L ☐ A ☐ B ☐ C ☐ D

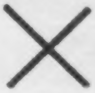
PROBLEM 4 LOWER
Regulatory traffic signs are posted for controlling the right-of-way, directing the movement of traffic, and:

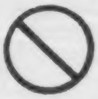
ANSWER 4L Frame #24
A. Providing route information.
B. Providing parking information.
C. Imposing speed limitations.
D. Warning of possible hazards.

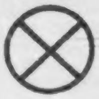
4L ☐ A ☐ B ☐ C ☐ D

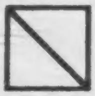
PROBLEM 5 LOWER
Which shape of the emblems illustrated when superimposed in red over a basic symbol, gives the symbol a negative meaning?

ANSWER 5L Frame #27


A.


B.


C.


D.

5L ☐ A ☐ B ☐ C ☐ D

PROBLEM 6 LOWER
In rural areas, warning signs are usually placed about 750' in advance of a hazard. In urban areas, the warning signs precede hazards by about:

ANSWER 6L Frame #31
A. 350 feet.
B. 100 feet.
C. 500 feet.
D. 250 feet.

6L ☐ A ☐ B ☐ C ☐ D

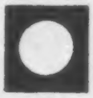
PROBLEM 7 LOWER
Diamond shaped warning signs may have legend panels attached. The accepted abbreviation for the word "crossing" on these panels is:

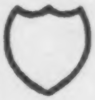
ANSWER 7L Frame #32
A. CSNG.
B. XING.
C. +ING.
D. No abbreviation authorized.

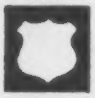
7L ☐ A ☐ B ☐ C ☐ D

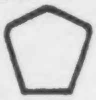
PROBLEM 8 LOWER
The uniform state route marker that the individual states are encouraged to adopt is shaped like which example illustrated to the right?

ANSWER 8L Frame #42


A.


B.


C.


D.

8L ☐ A ☐ B ☐ C ☐ D

PROBLEM 9 LOWER
An interstate highway spur, which branches off of the main route and does not return, is numbered:

ANSWER 9L Frame #43
A. Based on its compass direction.
B. In odd-hundreds.
C. In even-hundreds.
D. With any even number.

9L ☐ A ☐ B ☐ C ☐ D

PROBLEM 10 LOWER
A Civil Defense evacuation route is designated by a route marker which is posted in the shape and background color of a:

ANSWER 10L Frame #44
A. Blue circle.
B. Yellow triangle.
C. Red square.
D. Green diamond.

10L ☐ A ☐ B ☐ C ☐ D

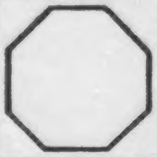
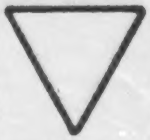
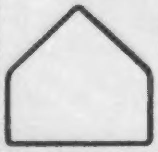
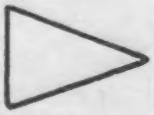
AP-4L

EVALUATION E11a
(Page 4 of 4 pages)

This Teach/Test has been prepared to check your retention of the information covered in the audio visual program based on the Manual of Uniform Traffic Control Devices.

W/1 UPPER

©
SAFETY CENTERS INC.
SAFETY THROUGH PROGRAMMED LEARNING
BOX 2883 PAWTUCKET, R.I. 02861

			A B C D
PROBLEM 1 UPPER The background color that is reserved exclusively for traffic signs which have a prohibitory or restrictive message is:		ANSWER 1U Frame #4 A. Red. B. Blue. C. Green. D. No specific color.	1U ☐ ☐ ☐ ☐
PROBLEM 2 UPPER Warning signs are constructed in a variety of shapes. When colored with an orange background, they indicate:		ANSWER 2U Frame #5 A. Prohibited passing. B. Construction or maintenance. C. Sharp curves. D. Heavy traffic.	2U ☐ ☐ ☐ ☐
PROBLEM 3 UPPER A general warning sign posted to alert you to existing or potential hazards on or near the highway has a background which is colored:		ANSWER 3U Frame #6 A. White. B. Orange. C. Green. D. Yellow.	3U ☐ ☐ ☐ ☐
PROBLEM 4 UPPER While driving, when you see a green sign over or beside the roadway, you know it will give you information concerning:		ANSWER 4U Frame #7 A. An upcoming hazard. B. The maximum legal speed. C. Direction or distance guidance. D. A prohibition or restriction.	4U ☐ ☐ ☐ ☐
PROBLEM 5 UPPER Guide signs that provide guidance to rest areas, or to places where personal and vehicular services are available are what color?		ANSWER 5U Frame #8 A. Blue. B. Green. C. White. D. Orange.	5U ☐ ☐ ☐ ☐
PROBLEM 6 UPPER Regulatory signs that are used to regulate the speed and direction of traffic are rectangular in shape and utilize the two colors:		ANSWER 6U Frame #10 A. Green and white. B. Yellow and black. C. Red and white. D. Black and white.	6U ☐ ☐ ☐ ☐
PROBLEM 7 UPPER An octagon shaped sign, like the example here, has only one meaning. That meaning is:		ANSWER 7U Frame #13 A. Do not enter. B. Yield. C. Stop. D. Pedestrian crossing.	7U ☐ ☐ ☐ ☐
PROBLEM 8 UPPER A triangular sign with one point downward, as illustrated here, always means:		ANSWER 8U Frame #14 A. Yield the right-of-way. B. School crossing. C. Caution. D. Wrong way.	8U ☐ ☐ ☐ ☐
PROBLEM 9 UPPER A yellow pentagon, posted point up as shown to the right, may indicate an advance school warning, or:		ANSWER 9U Frame #15 A. A No Passing zone. B. An approaching crosswalk. C. A school crossing zone. D. A church nearby.	9U ☐ ☐ ☐ ☐
PROBLEM 10 UPPER A pennant sign may be yellow or orange. It is posted on the left side of the roadway and means:		ANSWER 10U Frame #16 A. Change in road surface ahead. B. Bump ahead. C. Speed zone. D. No Passing zone.	10U ☐ ☐ ☐ ☐

AP-4U

MODULE 12: HUMAN FUNCTIONS - IPDE

3/79

OBJECTIVE

WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS ON TOPICS RELATED TO THE IDENTIFICATION, PREDICTION, DECISION, AND EXECUTION PROCESS, THE STUDENT WILL RESPOND WITH 70% ACCURACY.

ON A SERIES OF VISUALS THAT SHOW TRAFFIC SCENES, IDENTIFY RELEVANT CUES TO POTENTIAL HAZARDS, MAKE PREDICTIONS OF HOW THOSE POTENTIAL HAZARDS MAY OR MAY NOT AFFECT THE SAFE PATH OF TRAVEL FOR SPECIFIC DRIVERS. INDICATE WHAT DECISION YOU WOULD MAKE IF YOU WERE THE DRIVER, AND JUSTIFY YOUR DECISION.

IN THE T.S.E. CAR, THE STUDENT WILL DEMONSTRATE APPROPRIATE SEARCH AND SCAN HABITS, IDENTIFY RELEVANT CUES TO POTENTIAL HAZARDS, DECIDE WHAT ADJUSTMENT SHOULD OR SHOULD NOT BE MADE, AND DEMONSTRATE CORRECT DECISIONS BY EXECUTING THE DECISION HE OR SHE MADE FOR SPECIFIC DRIVING TASKS AS THEY ARE COVERED THROUGHOUT THE COURSE.

CONCEPTS

Sensing: vision; hearing; touch; smell; and feel. Search patterns.
Related concepts: judge; estimate; interpret; evaluate; assess; infer.
Stored information essential for predictions: traffic laws; human traits and limitations; vehicle capabilities; roadway environmental hazards.
Empathy - an aid to prediction.
Distance, time, and gap judgements: of oncoming vehicles; when following and overtaking; when passing; when merging at right angles and on ramps; when stopping.
Relationships of vehicle speed, size, distance, color and angle of approach to distance-speed judgements.
Kinds of decisions: simple, habitual, complex, risk involved.
Separating and Compromising hazards; speed and position adjustment.
Search and Scan; adjust speed.

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ________________, pp. ________.
2. In a classroom group setting, view:
   (a) Identification, A Human Function, (FS,C).
   (b) The Smith System of Safe Driving, (16mm film).
   (c) Prediction, A Human Function, (FS,C).
   (d) Decision -- Execution, (FS,C).
   (e) Compromise and Separate, (FS,C).
3. In classroom or small group settings, participate in perceptual development by viewing and recording number sequences and answering questions related to slides of traffic scenes in Slide Trays S12a, b, c, and d.
4. Independently complete Worksheets, W12a, b, and c.
5. In a classroom group setting, participate in a teacher-led exercise relating to predictions and decisions using overhead transparency traffic situation set T12a.
6. In the T.S.E. car, practice the process of identification, prediction, decision, and execution.

EVALUATION

1. Complete Evaluation E12 (Objective Test).
2. Complete Evaluation E12 (Visuals).
3. In-car evaluation of application of IPDE will be accomplished in modules on each specific driving task.

3/79

Answer Sheet for Perceptual Development
(Module #12 Human Functions - IPDE, Student Learning Activity #3)

Name________________________________ Dates____________________________

Slide Tray #_______________________

Directions: When the slide is a number, record as much of the number as you can on the lettered (a-g) lines in sequence. If you were unable to determine any of the number, put an "X" on the line. When the slide is a traffic scene, use the numbered sections below and put an "X" on the line if the statement is true of the scene you were just shown.

Set 1	Set 2	Set 3
a.________________	a.________________	a.________________
b.________________	b.________________	b.________________
c.________________	c.________________	c.________________
d.________________	d.________________	d.________________
e.________________	e.________________	e.________________
f.________________	f.________________	f.________________
g.________________	g.________________	g.________________

1. A.______ B.______ C.______ D.______ E.______
2. A.______ B.______ C.______ D.______ E.______
3. A.______ B.______ C.______ D.______ E.______
4. A.______ B.______ C.______ D.______ E.______
5. A.______ B.______ C.______ D.______ E.______
6. A.______ B.______ C.______ D.______ E.______
7. A.______ B.______ C.______ D.______ E.______

Score: tray #____ Set #1____, Set #2____, Set #3____

To the teacher: Directions for setting up and using slide trays S12a, b, c, and d, for development. (Page 1 of 2 pages)

1. Make transparency masters of the following pages of Numbers and Questions. Cut the transparency into squares (on the lines) and mount the squares in "easy mount" slide frames (e.g., Kodak "Ready Mounts" 2x2). You will need from 150 to 200 frames.
2. Cut up the Shell "Perception of Driving Hazards" Filmstrips and mount the following in half-frame slide mounts. (It is suggested that the slides be numbered, e.g., 5HB which would mean the 5th frame from Highways and Byways. It is also suggested that the slides with question-statements be numbered this way also.)

   From FS Urban & Suburban, Frames 1, 7, 9, 10, 11, 13, 15, 22, 25, 28.
   From FS Limited Access, Frames 7, 8, 10, 11, 14, 17.
   From FS Highways and Byways, Frames 1, 5, 6, 7, 8, 10, 13, 16.
3. Put slides in Kodak Carrousel 80 trays with groupings of 3 sets per tray of 7 numbers and 1 to 3 traffic scenes.

   For tray S12a, use mostly 4 or 5 digit numbers with an occasional larger number and 2 traffic scenes in each set as follows from the Shell Perception FS: 1HB, 6HB; 25US, 11LA; 10LA, 22US.

   For trays S12b, c, and d, use mostly larger numbers with an occasional 4 to 5 digit number and 1 to 3 traffic scenes in each set. Vary the pattern (e.g., don't start every set with a number). Before and after each number slide be certain to put an opaque slide (the cardboard used for back on writing tablets cut into 2"x2" squares works good for this.) For each traffic scene, follow with the appropriate "question" slide or slides.
4. Use tray Sa for the first 3 session. Then use the sets from Sb, c, and d for 9 sessions and repeat b, c, and/or d for additional sessions.
5. Once you have set up each tray, you can make "keys" using the answers sheet found in the materials for Module #12, Student Learning Activity #3.
6. You can "localize" or "modernize" this activity by making your own slides of traffic scenes and question-statements about them.
7. Directions for showing the slides. Have fully dark room. Use a Carrousel projector. Begin by leaving the number slides on the screen for a second and as you progress through the sessions, shorten the time 'till you do not release the "forward" button for the number slide so that it only shows for an instant. Show the traffic scenes for about 3 seconds to begin with and as you progress through the sessions shorten the time to a second or less that the traffic scene appears on the screen. Allow enough time between the number slides or while the questions are on the screen for the students to record the number or answer the questions.
8. You may score each student's responses for quantitative comparison of different students and quantitative comparison for students when repeating trays b, c, and d.

Suggested scoring follows:

1 point for fully correct 4 or 5 digit number.
2 points for fully correct 6 or larger digit number.
No partial points or subtracted points for numbers.
Positive or negative points as assigned to each question-statement as follows on next page:

3/79

Slide Tray Directions (S12a, b, c, d)
Page 2 of 4 pages

Urban and Suburban	1.	A.	Bike on right	2
		B.	Oncoming car	1
		C.	Bike on left	3
		D.	Car entering street from driveway on right	1
	2.	A.	Child visible on right	3
		B.	Brake lights on car ahead	2
		C.	Car about to pull out on left	-2
	7.	A.	Car leaving parking place	2
		B.	Boy riding bike in right lane	-2
		C.	Light colored car with brake light on in parking place	3
		D.	Car changing lanes	1
	9.	A.	Bike on the right	1
		B.	Theater (movie show)	1
		C.	Car with wheels turned out in parking space	3
		D.	Broken glass on street	-2
		E.	Car on left over center line	2
	10.	A.	Convertible on right	3
		B.	Beginning of one-way street	-3
		C.	Station wagon on left	1
		D.	Oncoming truck entering your lane	-3
		E.	Blue and white car entering street from right	2
	11.	A.	Parked car ahead	1
		B.	Car in driveway on right	-3
		C.	Bike on sidewalk	1
		D.	One oncoming car visible	2
	13.	A.	Traffic light red	-2
		B.	Car behind 2nd bus	3
		C.	Pedestrian on right	3
	22.	A.	Stop and go light-green	1
		B.	Car crossing in front of truck	3
		C.	Children on right	-2
		D.	Man in street	-2
	25.	A.	Car in left lane	2
		B.	Fire truck	1
		C.	Stop and go light-green	2
	28.	A.	Taxi to the left	1
		B.	Man at right curb	3
		C.	Man in street beyond cross street	2
		D.	Stop sign ahead	-3

Limited Access	8.	A.	2 cars ahead	1
		B.	Convertible driver looking at seat	3
		C.	Car parked on left	-2
		D.	Hitchhiker on right	-3
	10.	A.	Middle car over line	3
		B.	Car passing on left	-2
		C.	Car off road on left side	2
	11.	A.	Car on left moving into your lane	1
		B.	Exit sign	2
		C.	Car on right moving into your lane	-3
	14.	A.	Two cars on left changing lanes to the right	1
		B.	Three cars in left lane	3
		C.	Animal by road on left	-2
		D.	Exit on right	-3
	15.	A.	3-lane expressway	-1
		B.	Car parked on right	2
		C.	Car passing on left	1
		D.	Red car in same lane ahead	3
	17.	A.	Two cars on left changing lanes	1
		B.	Deer in median (grass area)	-2
		C.	Truck in right lane	2
		D.	Three cars in left lane	3
		E.	Hitchhiker on right	-3
Highways and Byways	1.	A.	Children on right	2
		B.	School bus approaching	1
		C.	Stop sign out on bus	-3
		D.	Oncoming car passing bus	2
		E.	Guard rail on left	2
	5.	A.	Light-colored oncoming car	1
		B.	Snow limiting lane	2
		C.	Car approaching from left	-3
		D.	Oncoming car nearing curve	2
		E.	Car behind silo	3
	6.	A.	Car ready to pull on to road	2
		B.	Oncoming car is passing	3
		C.	Sign - curve ahead	-3

Highways and Byways (Continued)	7.	A.	Car approaching on right	3
		B.	Oncoming car	3
		C.	Mud on road	-2
		D.	Soft shoulder	1
	8.	A.	Men standing by tractor	1
		B.	Truck parked on left	1
		C.	Oncoming car on curve	1
	10.	A.	Truck approaching from right	1
		B.	Traffic light ahead	-3
		C.	Gravel in lane	3
		D.	Car parked on right	-2
		E.	Four-lane road	2
	13.	A.	Oncoming truck	-3
		B.	Stop sign ahead	1
		C.	School bus approaching on right	1
		D.	Car approaching on left	3
		E.	Black oncoming car stopped	-2
	16.	A.	Man on right	2
		B.	Car ahead wrong side of road	2
		C.	Oncoming car in distance	3

Slide Tray Masters (S12a, b, c, d)
(Page 1 of 5 pages)

3/79

1US
A.Bike on right
B.Oncoming car
C.Bike on left

1US (2)
D.Car entering street from driveway on right

2US
A.Child visible on right
B.Brake lights on car ahead

2US (2)
C.Car about to pull out on left

7US
A.Car leaving parking place
B.Boy riding bike in right lane

7US (2)
C.Light colored car w/brake light on in parking place

7US (3)
D.Car changing lanes

9US
A.Bike on right
B.Theater(movie show)

9US (2)
C.Car w/wheels turned out in parking space
D.Broken glass on street

9US (3)
E.Car on left over center line

10US
A.Convertible on right
B.Beginning of one-way street

10US (2)
C.Station wagon on left
D.Oncoming truck entering your lane

10US (3)
E.Blue & white car entering street from right

11US
A.Parked car ahead
B.Car in driveway on right

11US (2)
C.Bike on sidewalk
D.One oncoming car visible

13US
A.Traffic light red
B.Car behind 2nd bus

13US (2)
C.Pedestrian on right

22US
A.Stop & go light-green
B.Car crossing in front of truck

22US (2)
C.Children on right
D.Man in street

25US
A.Car in left lane
B.Fire truck
C.Stop & go light-green

28US
A.Taxi to left
B.Man at right curb
C.Man in street beyond cross st.

28US (2)
D.Stop sign ahead

8LA
A.2 cars ahead
B.Convertible driver looking at seat

8LA (2)
C.Car parked on left
D.Hitchhiker on right

10LA
A.Middle car over line
B.Car passing on left

10LA (2)
C.Car off road on left side

11LA
A.Car on left moving into your lane
B.Exit sign

11LA (2)
C.Car on right moving into your lane

Slide Tray Masters (S12a, b, c, d)
(Page 2 of 5 pages)

3/79

14LA

A. Two cars on left changing lanes to right
B. 3 cars in left lane

14LA (2)

C. Animal by road on left
D. Exit on right

15LA

A. 3-lane expressway
B. Car parked on right

15LA (2)

C. Car passing on left
D. Red car in same lane ahead

17LA

A. Two cars on left changing lanes
B. Deer in median (grass area)

17LA (2)

C. Truck in right lane
D. 3 cars in left lane

17LA (3)

E. Hitchhiker on right

1HB

A. Children on right
B. School bus approaching

1HB (2)

C. Stop sign out on bus
D. Oncoming car passing bus

1HB (3)

E. Guard rail on left

5HB

A. Light-colored oncoming car
B. Snow limiting lane

5HB (2)

C. Car approaching from left
D. Oncoming car nearing curve

5HB (3)

E. Car behind silo

6HB

A. Car ready to pull on to road
B. Oncoming car is passing

6HB (2)

C. Sign-curve ahead

7HB

A. Car approaching on right
B. Oncoming car
C. Mud on road
D. Soft shoulder

8HB

A. Men standing by tractor
B. Truck parked on left

8HB (2)

C. Oncoming car on curve

10HB

A. Truck approaching from right
B. Traffic light ahead
C. Gravel in lane

10HB (2)

D. Car parked on right
E. Four-lane road

13HB

A. Oncoming truck
B. Stop sign ahead
C. School bus approaching right

13HB (2)

D. Car approaching on left
E. Black oncoming car stopped

16HB

A. Man on right
B. Car ahead on wrong side of road

16HB (2)

C. Oncoming car in distance

Slide Tray Masters (S12a, b, c, d)
Page 3 of 5 pages)

3/79

7962	9435	14963	14963	884933
7921	0471	1159	19683	418327
5738	1706	2089	21873	7921
8137	59049	3257	31078	0471
8619	17714	5738	44153	22700
2049	19683	8619	59761	90165
8314	44153	01737	86593	43082

Slide Tray Masters (S12a, b, c, d)
(Page 4 of 5 pages)

3/79

01737	364285	770516	142857	857241
68060	857431	259088	0752166	364295
90165	602857	608790	4051201	697281
59049	89639	884933	4110254	928063
38145	22590	239044	38145	061973
53606	42540	185769	01737	172603
697281	97623	418327	602857	770516

Slide Tray Masters (S12a, b, c, d)
(Page 5 of 5 pages)

3/79

5074059	461009	59316742		
6279081	669699	41177481		
9614051	838893	17528313		
4110254	8463428	41752396		
1645903	6547425	85713629		
38389	6360932	5796384		
64216	4231754			

WORKSHEET W12a
(Page 1 of 4 pages)

DIRECTIONS:

On the following pages thare are given several different Traffic Situations. On a separate sheet of paper, answer the following questions on each traffic situation.

On Traffic Situation A1-1

1. Imagine you are driving Car A
2. Identify all of the hazards to and requirements for Car A.
3. As you came on this situation what advance clues could help you to identify the situation to give you time to respond?
4. What action should you decide to take?

Traffic Situation A1-4

1. Imagine you are driving Car A
2. Does Car B become a hazard under these circumstances? How?
3. If Car B continues to come on out and you have to take an alternative route, does Car C become a hazard? How?
4. If you are going too fast to stop, is there a safe alternative route that you can take in Car A? What?
5. If Car C saw you pulling into his lane could he take a safe alternative route? Why?
6. If you had identified the hazards early enough, and had made a correct prediction of the clues from these hazards, what decision should you have made as the driver of Car A?

Traffic Situation A1-6

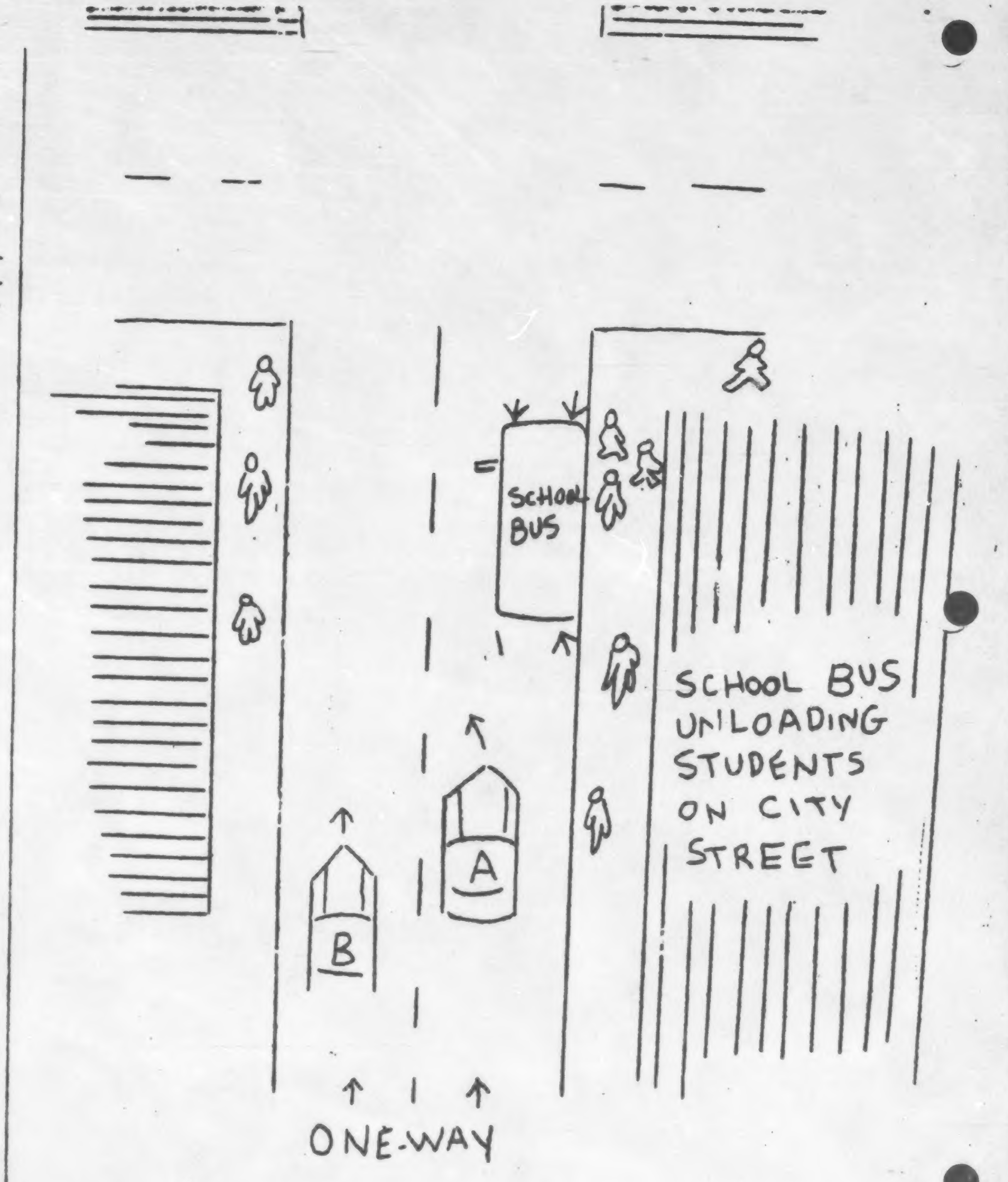
1. Imagine you are driving Car A
2. What is the potential situation?
3. What predictions can you make about the hazards in this situation?
4. What decision or responses might you make that could introduce conflicts?
5. What action could you take that could prevent this situation from becoming a dangerous situation?
6. Imagine you are driving Car B
7. What predictions can you make about the possible actions of the driver of Car A?
8. What prediction is most likely?
9. What decision should you make that would minimize the chances of conflict?

WORKSHEET W12a
(Page 2 of 4 pages)

3/79

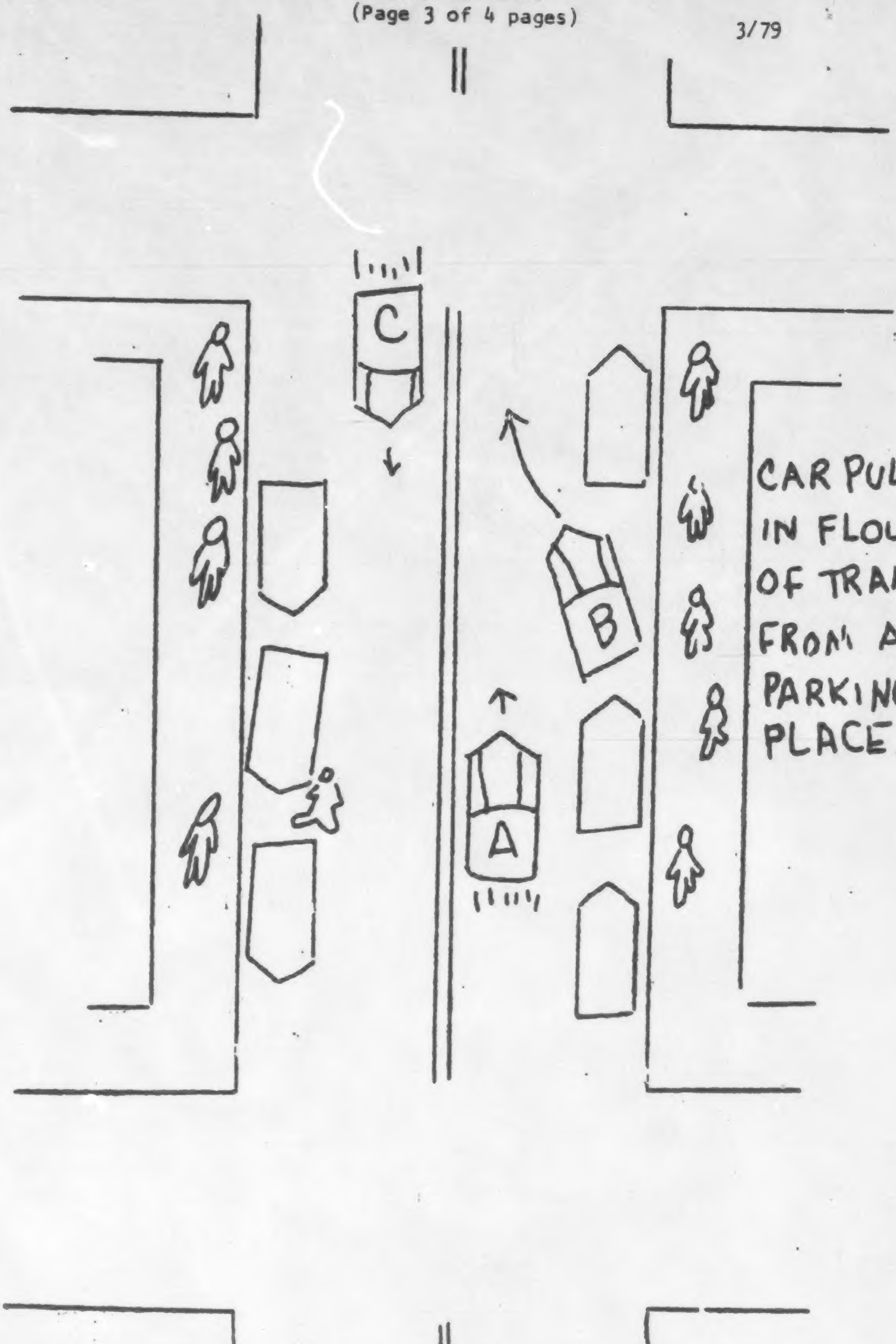
SITUATION
A1-1

URBAN TRAFFIC FLOW


SCHOOL BUS
A
B
SCHOOL BUS UNLOADING STUDENTS ON CITY STREET
ONE-WAY

SITUATION
A1-4

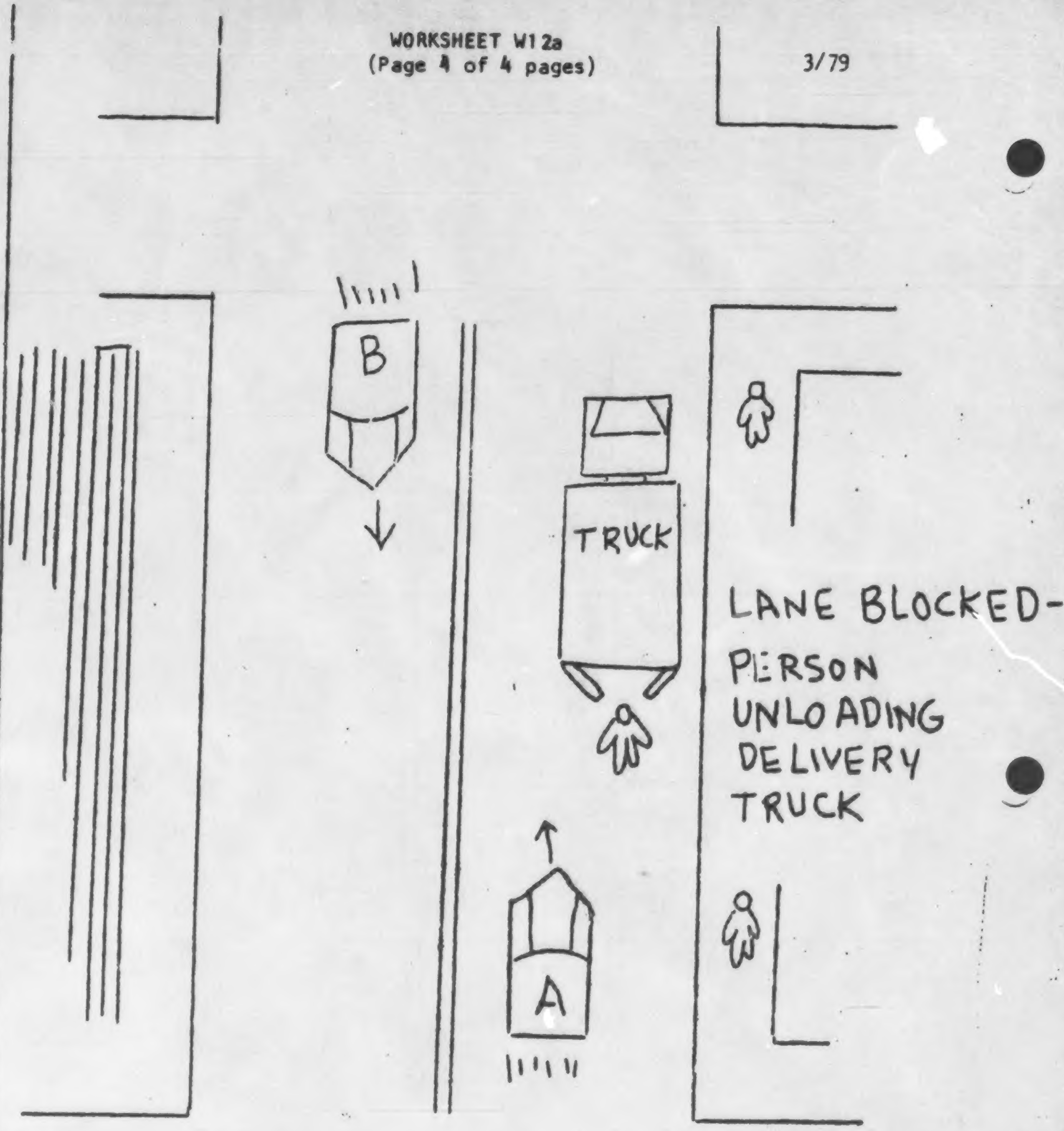
URBAN TRAFFIC FLOW



CAR PULLING IN FLOW OF TRAFFIC FROM A PARKING PLACE.

SITUATION A1-6

URBAN TRAFFIC FLOW


B
TRUCK
LANE BLOCKED-
PERSON
UNLOADING
DELIVERY
TRUCK
A

WORKSHEET W12b (Page 1 of 5 pages)

Directions:

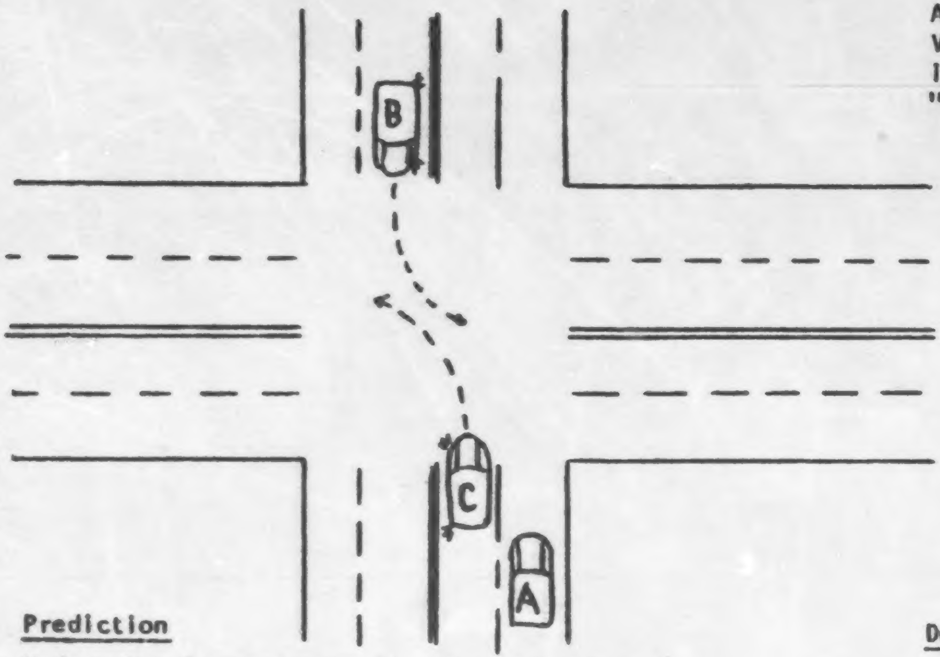
You will be given several pages of traffic situations. Answer the questions below each illustration based upon your predictions of what might take place in each traffic situation.

YOU ARE ALWAYS DRIVING VEHICLE "A".

There may not necessarily be a correct answer. Choose the answer that seems most correct to you.

After answering the questions, get together in groups of 3 or 4 and compare answers. Be prepared to justify your choice.

TRAFFIC SITUATION 1



Prediction

Under the circumstances in the above situation, the traffic cues would indicate that your prediction should be:

A.____

B.____

Which prediction do you think is correct and why?

____

____

____

Description

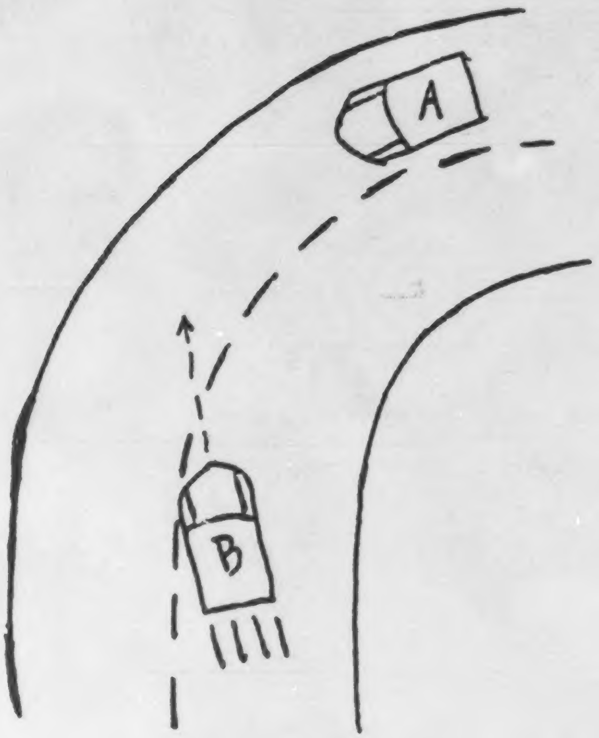
At this intersection that you are approaching, Vehicle "C" is making a left turn. While making his left turn, Vehicle "C" is hiding Vehicle "B" from your view.

Decision

What would you do in the above situation? Why?

TRAFFIC SITUATION 2

While rounding a curve in Vehicle "A" you suddenly see Vehicle "B" heading into your lane.



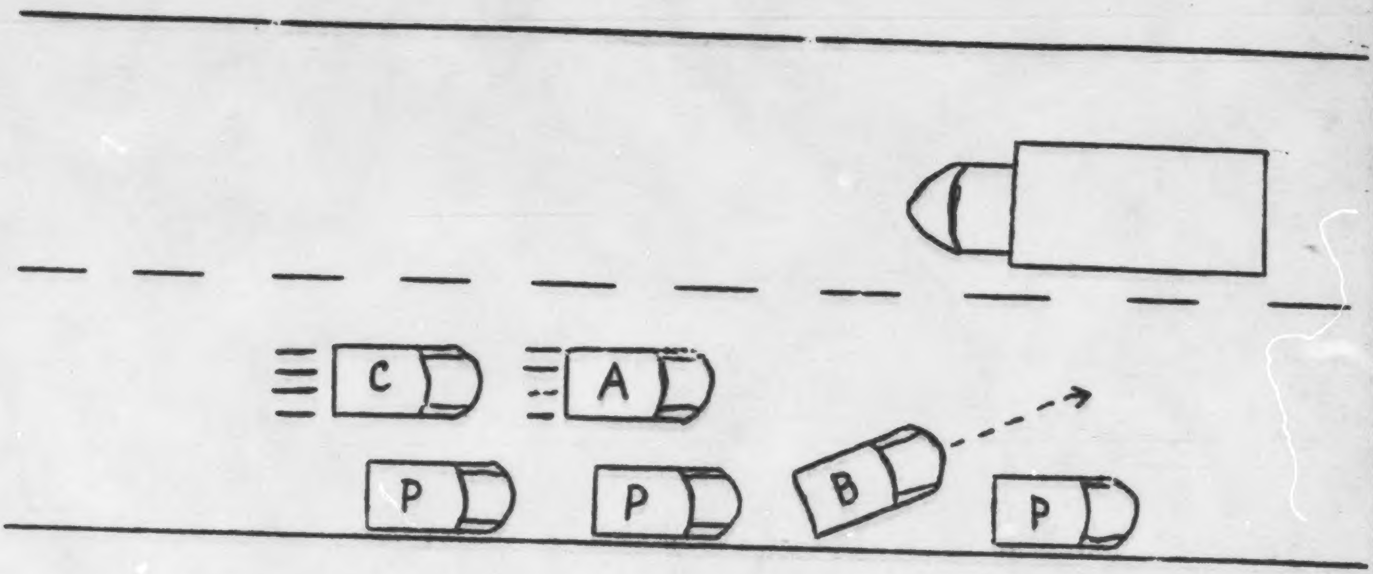
Questions:

1. What may happen to you in the above situation?

2. What could you do to prevent this from happening to you?

3. What might be done by you to cause a serious situation to occur?

TRAFFIC SITUATION 3



Direction:

As driver of Vehicle "A",

1. What might happen, due to the action of Vehicle "B"? Why?

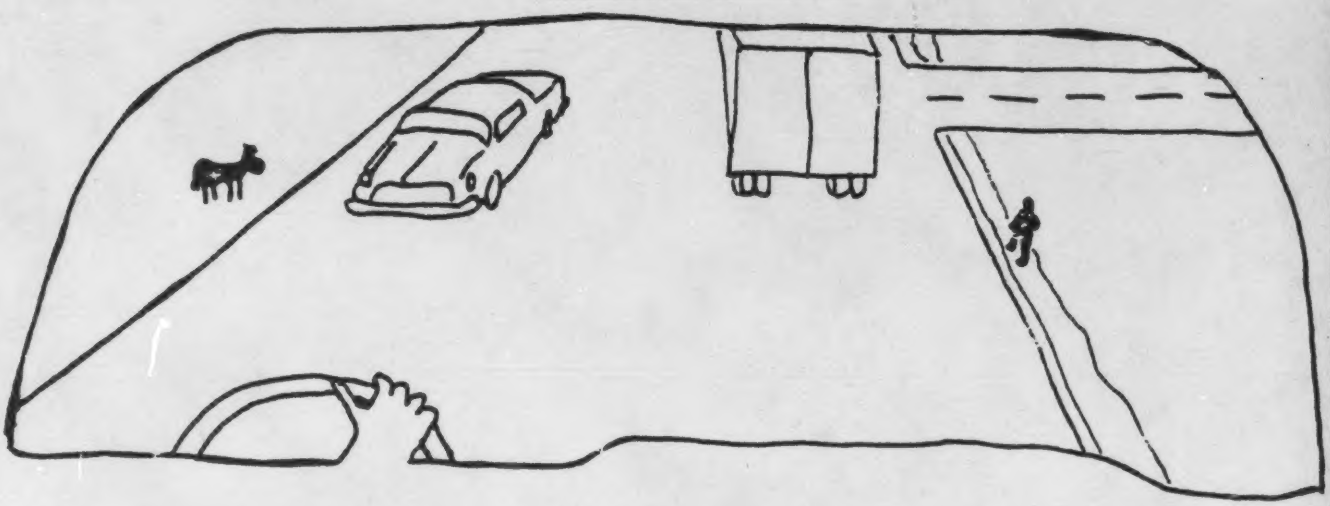
2. What might happen, due to the action of Vehicle "C"? Why?

3. What might happen, due to the combined actions of Vehicles "B" & "C"? Why?

4. What alternative actions could you take? Which do you think would be the best action to take?

3/79

TRAFFIC SITUATION 5



Questions

This is the view through your windshield

1. What predictions could you make concerning the above hazards that might cause you to change either your vehicle speed or direction?

WORKSHEET W12c (Page 1 of 2 pages)

Driving would be easier if potential hazards only presented themselves one at a time. But, it usually doesn't happen that way. Driving gets very complex at times. Four or five hazards may appear at one point. To handle these potential hazards, you will separate and/or compromise them.

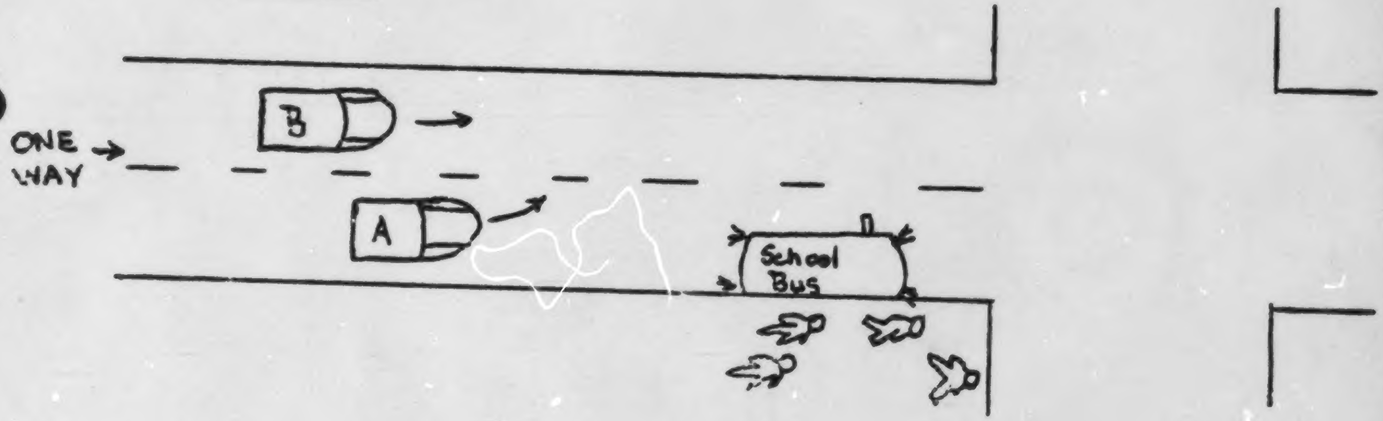
SEPARATE - To adjust speed, by braking or accelerating, to avoid passing two or more obstacles at one time.

COMPROMISE - To adjust vehicle position by steering, to minimize potential danger when you cannot separate two or more obstacles.

You are always the driver of Car A.

Now explain how you would separate and compromise the following situations:

SITUATION 1



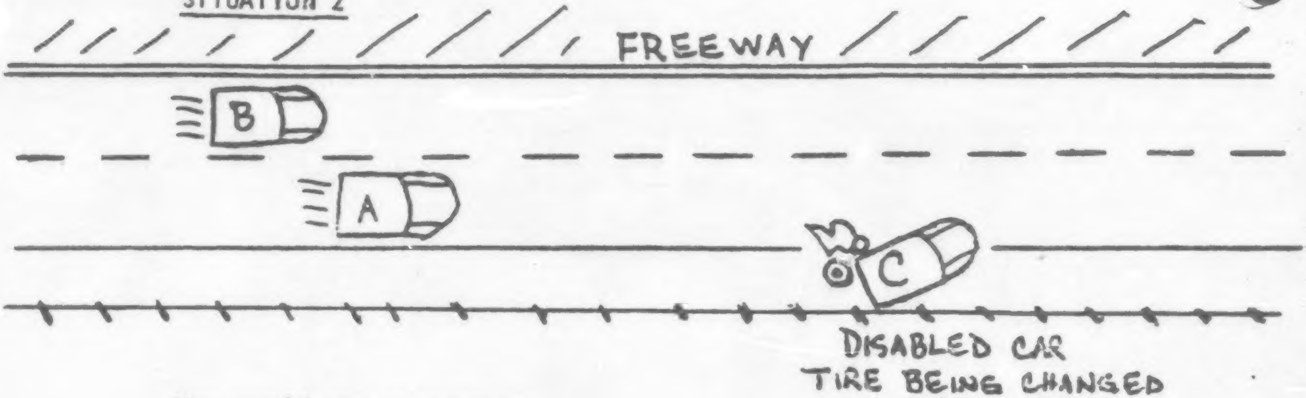
How would you separate:

How would you compromise:

3/79

WORKSHEET W12c (Page 2 of 2 pages)

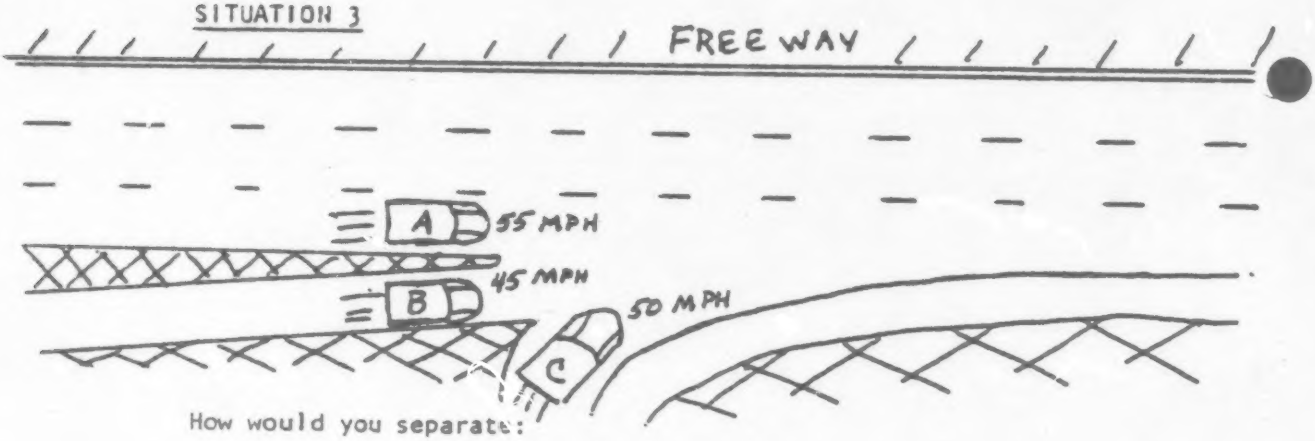
SITUATION 2


FREEWAY
B
A
C
DISABLED CAR
TIRE BEING CHANGED

How would you separate:

How would you compromise:

SITUATION 3


FREEWAY
A
55 MPH
B
45 MPH
C
50 MPH

How would you separate:

How would you compromise:

TEACHER-LED DISCUSSION

Transparency Set T12a
(Page 1 of 2 pages)

In the following, answers are samples of possible questions and possible correct answers.

1. Transparency A2-3

   Identify: Question. As driver of Car B, what conflict is about to be created by Car A?
   Answer. Car A moving simultaneously into right lane with you.

   Predict: Question. As the driver of Car B what are two actions you could predict about Car A.
   Answer. Car A will wait for you to clear the intersection; Car A will turn into your lane without waiting for you to rightfully clear the intersection.

   Decide & Execute: Question. What could you as the driver of Car B do to avoid conflict if you predict Car A will not wait.
   Answer. Forfeit your right of way to Car A and stop; blow horn to warn Car A you are there; brake and steer right to avoid collision.

2. Transparency A2-6

   Identify: Question. As the driver of Car B, what does the position of Car A tell you Car A might do?
   Answer. Car A probably intends to turn left.

   Predict: Question. As the driver of Car B, what are actions you could predict about Car A?
   Answer. Car A will wait for you to clear the intersection before turning. Car A will turn directly in front of your path--and may even stop directly in your path. Because of position in intersection, Car A could be bumped into your path if hit from behind.

   Decide & Execute: Question. If you predict that Car A will wait for you to clear the intersection, how should you decide to proceed.
   Answer. Cover the brake up to the point of no return if proceeding at sufficient speed to carry you through the intersection, then accelerate normally on past the car and move to the right as you do that.

   Question. If you predict Car A will not wait but turn in front of you, what could you have decided that could keep you out of a collision?
   Answer. To keep speed and position such to be able to stop before entering the intersection. To plan escape routes--no other cars visible in this situation, so possibly could swerve left.

3. Transparency C6-2

   Identify: Possible Question. What should each of the drivers identify is going to happen?
   Possible Answer. That if present paths with present speeds are continued, all three will be trying to occupy the same space at the same time.

   Predict: Possible Question. What might A predict?, B?, C?
   Possible Answers. (A) That Cars B & C will continue same speeds and conflict with each other and with Car A; that one of Cars B or C will yield but that the other will continue and conflict with Car A; that one of Cars B & C will yield and the other will accelerate to enter the freeway ahead of Car A.

(B) Car A will not move to the left and therefore, will conflict with Car B trying to enter freeway; Car C will continue present speed and therefore, will conflict with Car B for space on the entry ramp. (C) Car B will yield and Car A will move to the left, eliminating the conflicts; neither will yield or move, making conflicts high and collision likely.

Decide & Execute: Question. What do you think would be the best decision for each to make?
Answer. (A) Move to the center lane, (B) Yield to Car C, (C) If Cars A and B do as noted, Car C should accelerate to 55 MPH, and enter the far right lane ahead of Car B.

4. Transparency B3-3
Decide & Execute: Question. What action would be best for the driver of Car B?
Answer. Wait for truck to cross bridge. If the truck were further from the bridge, Car B could accelerate enough to cross the bridge before the truck starts to adjust position for crossing the bridge.

5. Transparency B4-6
Predict: Question. What possible conflict should the driver of Car A predict?
Answer. The trees block Car A's vision, so Car A should predict the possibility of a car partially or fully entering the roadway from the intersection.

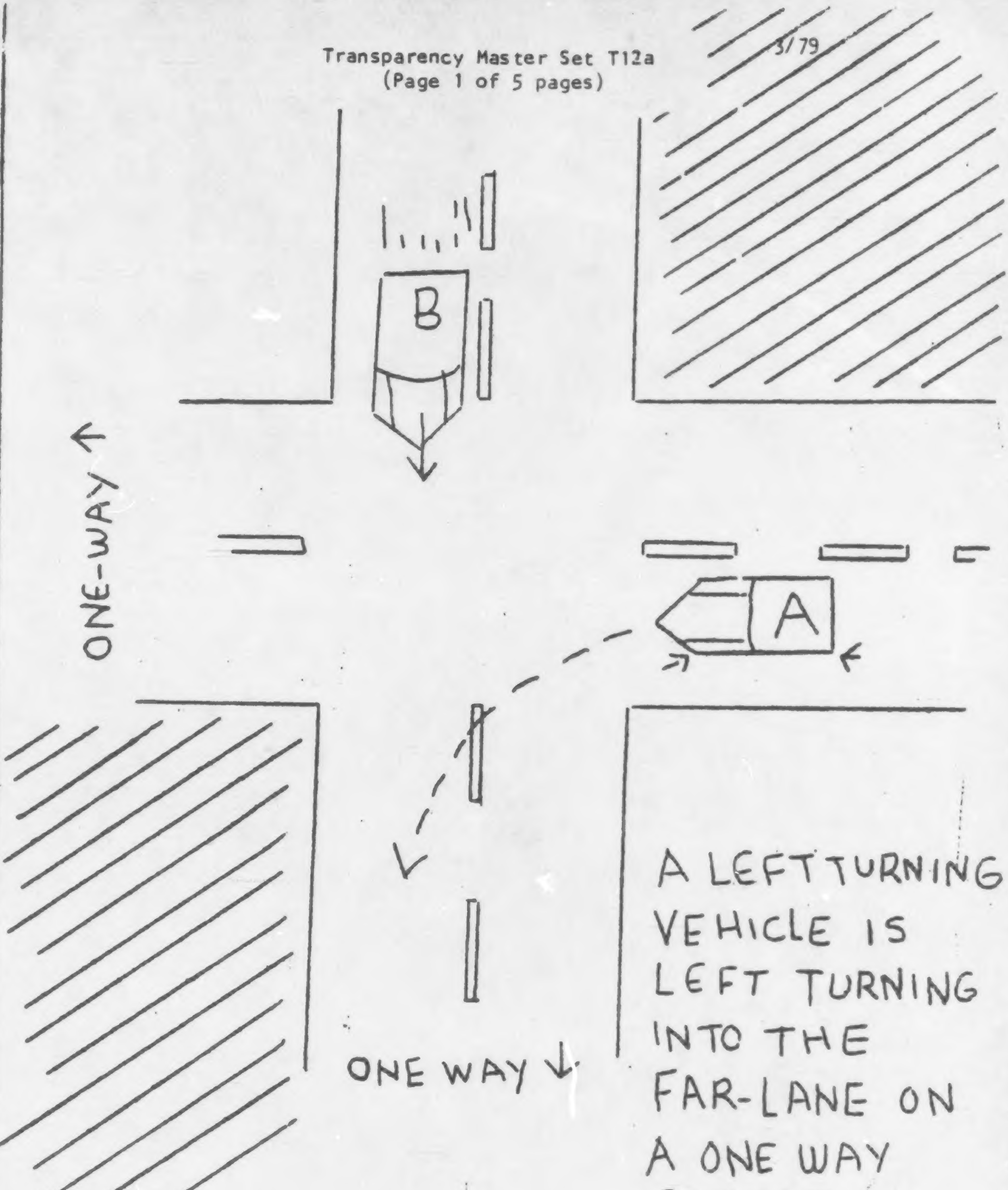
Decide & Execute: Question. What should the driver of Car A do to minimize risk at the intersection?
Answer. Car A should move near the center line, but not over it, be prepared to sound horn if Car B (once in right) appears not to be stopping, and be prepared to move to the right if a car a-proaches from the opposite direction. If visibility is such that Car A can determine that no car is approaching, Car A may even move further left than the center line while passing the intersection.

Transparency Master Set T12a
(Page 1 of 5 pages)

3/79

SITUATION
A2-3

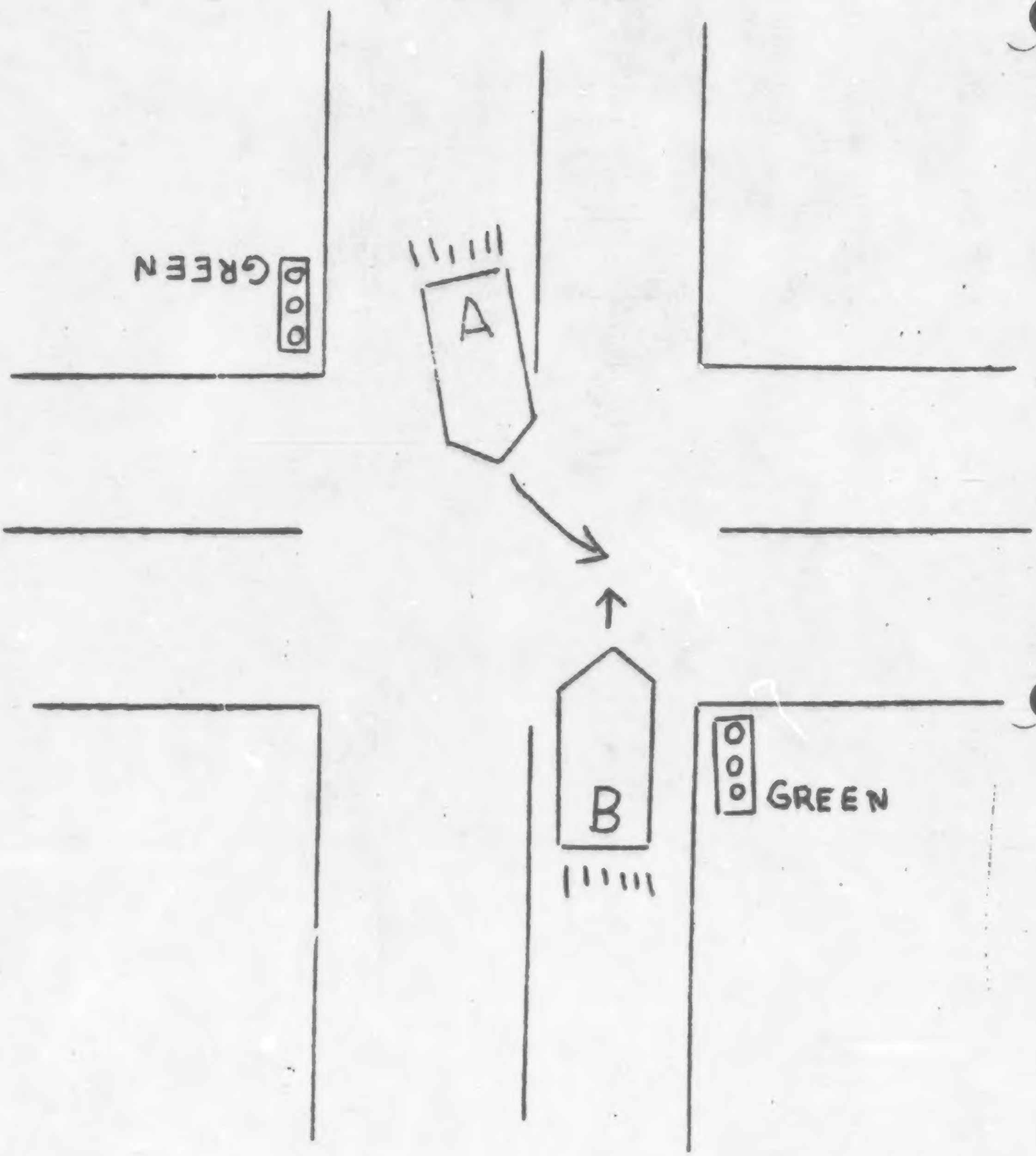
URBAN INTERSECTION



A LEFT TURNING VEHICLE IS LEFT TURNING INTO THE FAR-LANE ON A ONE WAY STREET.

SITUATION A2-6

URBAN INTERSECTION

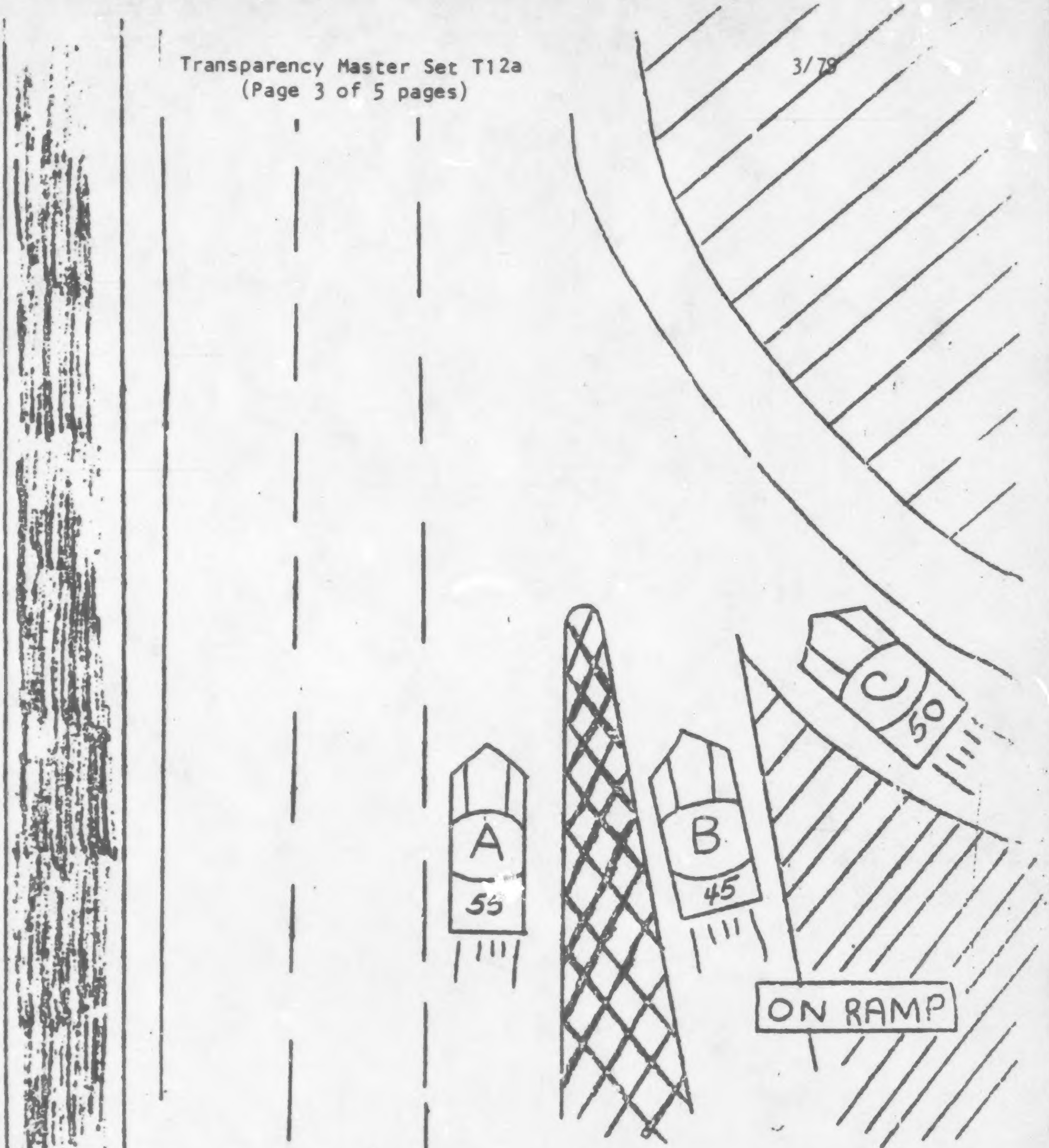

GREEN
A
B
GREEN

A LEFT TURN CONFLICT AT A GREEN LIGHT.

FREEWAY INTERCHANGE SITUATION C6-2

Transparency Master Set T12a
(Page 3 of 5 pages)

3/79

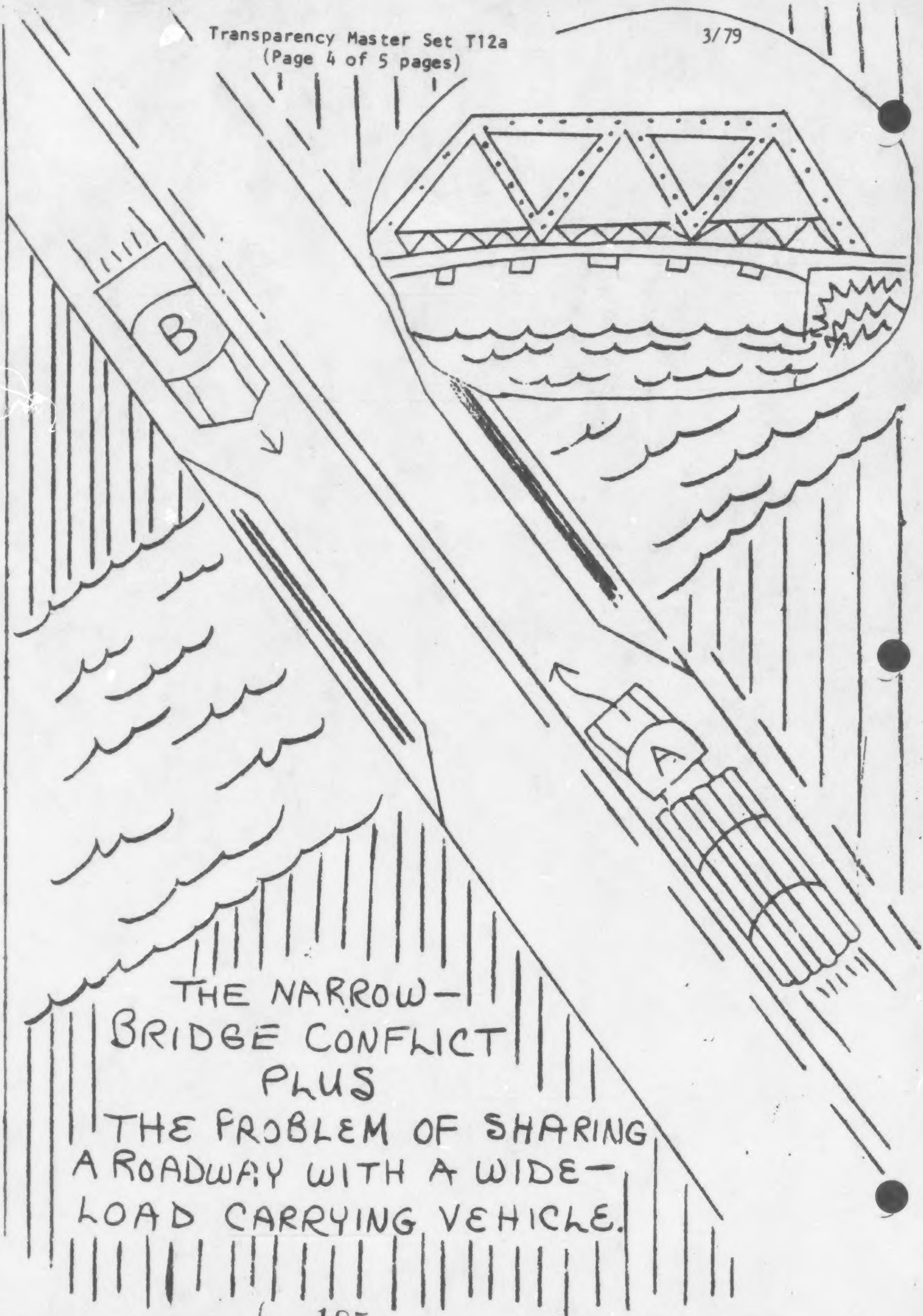

A
55
B
45
C
50
ON RAMP

A FREEWAY SITUATION PRODUCED BY TWO MERGING "ON-RAMPS".

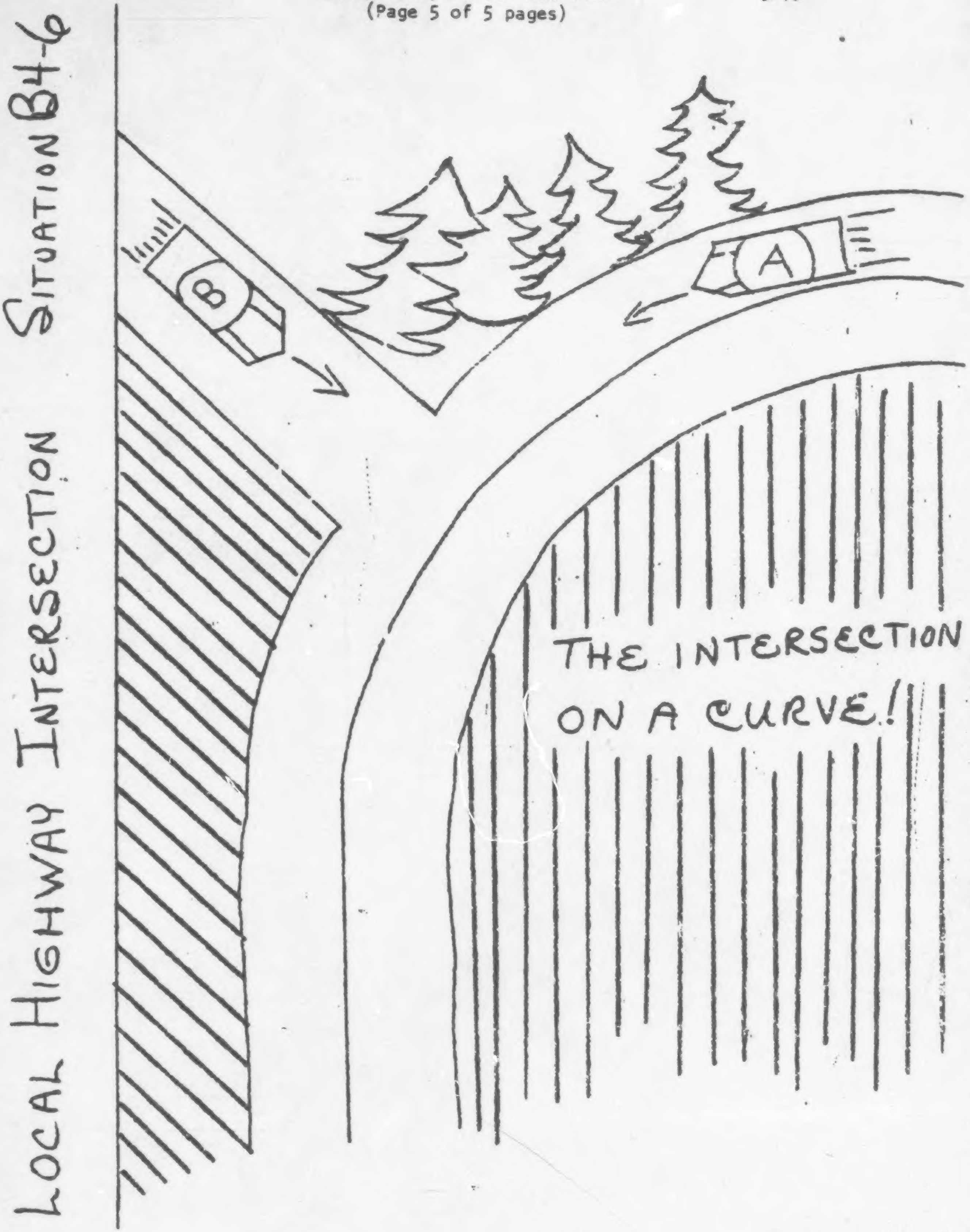
Transparency Master Set T12a
(Page 4 of 5 pages)

3/79

RURAL TRAFFIC FLOW SITUATION B 3-3



THE NARROW-BRIDGE CONFLICT
PLUS
THE PROBLEM OF SHARING A ROADWAY WITH A WIDE-LOAD CARRYING VEHICLE.


LOCAL HIGHWAY INTERSECTION
SITUATION B4-6
B
A
THE INTERSECTION ON A CURVE!

EVALUATION E12a (Objective Questions)
(Page 1 of 2 pages)

Directions: Write the letters of the correct answers on the separate answer sheet. A total of 14 points is needed to pass.

(No. 1-10, 1 point each)

1. When a driver looks for and recognizes hazards, he or she is:

   a). identifying
   b). predicting
   c). deciding
   d). executing

2. The key factor in identification is to have a plan that allows you to concentrate on seeing:

   a). everything in your traffic scene
   b). the important events or items
   c). all other vehicles and pedestrians
   d). all of the above

3. When you look far and near and side to side, you are:

   a). scanning
   b). centering
   c). checking
   d). monitoring

4. Considering how one may be affected by a hazard is part of the IPDE process known as:

   a). identifying
   b). predicting
   c). deciding
   d). executing

5. A driver should always try to maintain a visual lead time of:

   a). 2 seconds
   b). 4 seconds
   c). 8 seconds
   d). 12 seconds

6. Your predictions as a driver are:

   a). the basis for decisions
   b). concerned with seeing the entire traffic scene
   c). only important in heavy traffic
   d). none of the above

7. Your driving decisions depend mostly upon:

   a). your skill in maneuvering an automobile
   b). your reaction time
   c). the amount and quality of your information regarding the traffic scene
   d). the speed of your vehicle

EVALUATION E12a (Objective Questions)
Page 2 of 2 pages

8. The best way to handle a situation that involves more than one hazard is to:
    a). separate
    b). compromise
    c). minimize
    d). identify

9. If a driver must risk exposure to one hazard in order to avoid a more hazardous situation, he or she is:
    a). compromising
    b). separating
    c). minimizing
    d). identifying

10. A driver completes the IPDE process when he or she:
    a). makes a decision
    b). makes assumptions about a situation
    c). uses vehicle controls and equipment
    d). scans the traffic scene

(No. 11, 10 points)

11. Name the five Smith System driving rules and briefly define each. (Write the answer to this question on the back of your answer sheet).

EVALUATION E12a (Visuals)
(Page 1 of 2 pages)

Directions: During a maximum of five minutes of viewing each of the following four slides, identify relevant cues to potential hazards, make predictions on what those hazards may or may not do that would affect your intended path of travel, and make a decision based on those predictions. Justify your decision.

Make one identification, etc., for each letter listed under the specific heading. One point will be credited for each viable answer where expected. A total of 15 points is needed to pass.

Slide 1. Shell Perception FS #2 Limited Access

Identify a. ____________________

Predict a. ____________________

b. ____________________

Decide a. ____________________

Justify your Decision a. ____________________

Slide 2. Shell Perception FS #4 Highways & Byways

Identify a. ____________________

b. ____________________

Predict a. ____________________

b. ____________________

Decide a. ____________________

Justify your Decision a. ____________________

Slide 3. Shell Perception FS #13 Limited Access

Identify a. ____________________

Predict a. ____________________

EVALUATION E12a (Visuals)
Page 2 of 2 pages

Decide a.____
____
Justify your Decision a.______________________________
____

Slide 4. Shell Perception FS #18 Urban & Suburban

Identify a.____
____
Predict a.____
____
b.____
____
Decide a.____
____
Justify your Decision a.______________________________
____

June, 1979

MODULE 13: ROADWAY VARIATIONS

OBJECTIVE

WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS RELATED TO ROADWAY VARIATIONS, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

IN THE T.S.E. CAR THE STUDENT WILL DEMONSTRATE CORRECT PROCEDURES FOR DRIVING ON GRAVEL ROADS, NARROW PAVED ROADS, AND OPEN HIGHWAYS; FOR CROSSING RAILROAD TRACKS AND BRIDGES; AND FOR NEGOTIATING HILLS AND CURVES.

CONCEPTS

Roadway variations which when encountered, require adjustment of speed and/or direction and/or other procedures:

- hills
- curves
- graveled surface
- narrow paved roads
- bridges
- tunnels
- railroad crossings
- surface irregularities

Highways

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ________________, pp.________.
2. Independently read the pamphlet, "Safety at the Crossing."
3. Independently complete Worksheet W13a and in small groups of 2-4 compare answers.
4. Independently complete Worksheet W13b and in a classroom group setting, participate in a teacher-led discussion using the Worksheet.
5. In the T.S.E. car practice procedures for driving on the highway and in varying roadway conditions.

EVALUATION

1. Complete Evaluation E13.
2. In the T.S.E. car: demonstrate correct procedures for driving on gravel roads, narrow paved roads, and open highways by making no more than two errors in any one of the three while driving for a specified time of five minutes for each; demonstrate correct procedures for crossing railroad tracks and bridges, and for negotiating hills and curves during the time of driving the above roads by making no more than two errors in any of the four. (Note: A route should be planned which would include at least three bridges, four railroad crossings, a variety of hills and curves.)

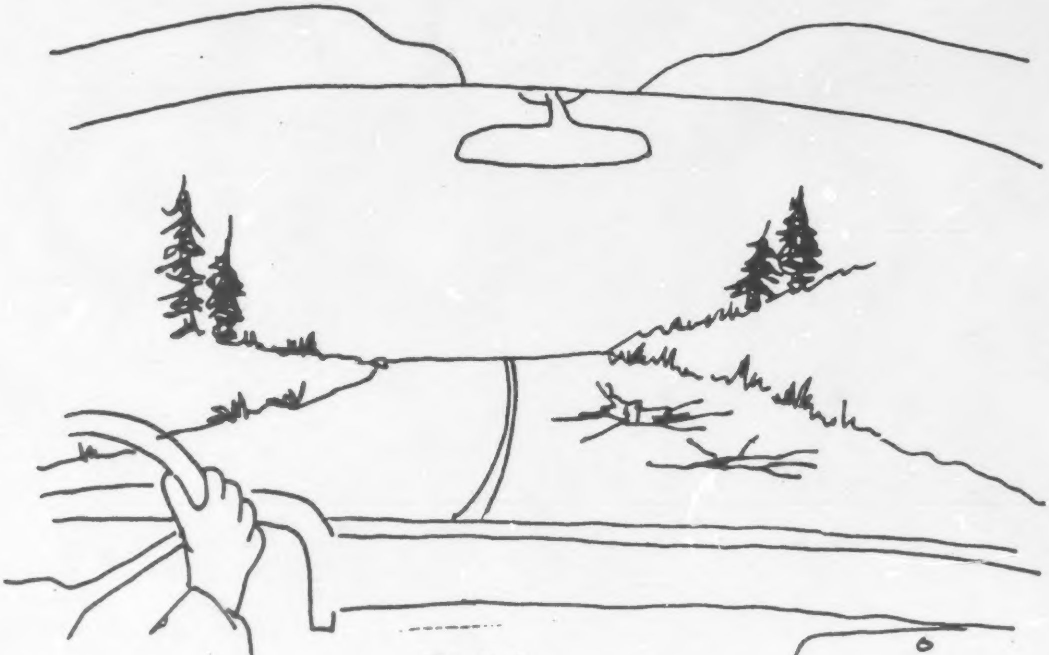
June, 1979

WORKSHEET (W13a)

(Page 1 of 7 pages)

Roadway Variations

Directions: Look at the sketch at the top of each page to visualize the roadway variation being considered. Read the information in the left column about characteristics and procedures for negotiating these roadway variations. Then, answer the questions in the right column. Once you have completed the Worksheet, compare your answers in a group of 2-4 students. On any answer you cannot agree, consult your teacher.



Chuckholes

Information

If possible, steer to avoid the chuckhole.

Procedure
Observe chuckhole
Reduce speed
If possible, steer to avoid chuckhole.
If chuckhole is unavoidable, brake, then release brake before wheels encounter the chuckhole. This procedure aids the suspension of the vehicle. Grasp the steering wheel firmly as you drive through a chuckhole.

If you hit a chuckhole with the brakes on, a greater shock is felt.

Apply brakes before hitting a chuckhole, releasing them as you get to the chuckhole.

Questions

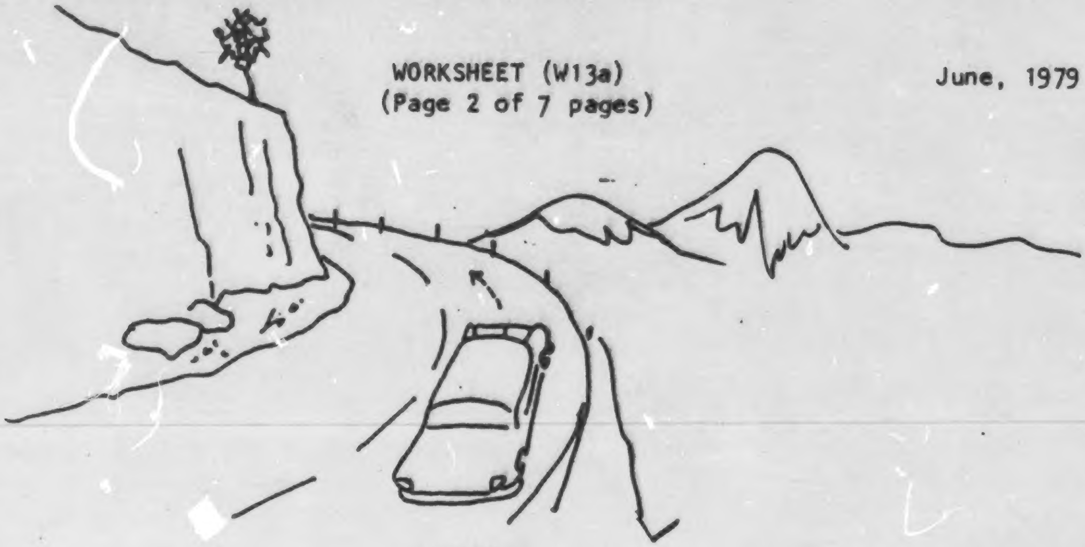
1. The most important driver adjustment when encountering a chuckhole is:
   a. reducing speed
   b. good braking
   c. steering properly

2. When brakes are applied continuously through the chuckhole, the shock transmitted through the vehicle will be
   a. less
   b. greater
   c. no difference

3. After reducing speed, the best procedure for encountering a chuckhole is to:
   a. release brakes as you drive through
   b. steer to avoid the chuckhole
   c. accelerate rapidly

WORKSHEET (W13a)
(Page 2 of 7 pages)

June, 1979



CURVES

Information

Speed must be reduced when taking a curve, due to a shortened sight distance.

This is the result of the principle of inertia. The straight line will be to the outside of the curve.

Chances of a vehicle skidding are minimized when a driver enters a curve slowly, maintains a constant speed through the first half of the curve, then a constant speed, or slightly accelerates through the rest of the curve.

When entering a curve, focus on the farthest clear path of travel. Look through the curve.

Check speedometer to make sure that you reduce speed.

If a vehicle enters a curve too fast, the rear end of the vehicle will tend to swing out one way or the other and the front end will not respond to steering.

Braking hard enough to lock the wheels will cause a vehicle to run off the road in a straight line. (Perhaps sideways)

Procedures

Look for curve signs.

Reduce speed, if necessary.

Look well ahead to anticipate steering corrections.

Maintain lane position. Maintain speed.

If speed is too great, brake lightly.

Questions

1. When a driver is approaching a curve, his sight distance is:
   a. increased
   b. decreased
   c. the same

2. Before encountering a sharp curve, a vehicle driver should ______________ his speed.
   a. increase
   b. decrease
   c. keep constant

3. When negotiating curves, the driver should:
   a. maintain lane position
   b. take the shortest route through the curve
   c. crowd the center line

4. If a driver has entered a curve too fast and then locks the brakes to reduce speed, the vehicle will:
   a. stop immediately
   b. slow gradually in his own lane
   c. continue in a straight line and go off the outside of the curve.

WORKSHEET (W13a)
(Page 3 of 7 pages)

June, 1979

HILLS

Information

Trucks and large vehicles travel slower when negotiating hills.

Slow down before you gain too much speed when driving down hill.

Always have your vehicle in gear when going down a hill.

Continuous partial brake pressure is the best method for controlling your vehicle's speed on down grades.

At the crest of a narrow roadway, keep to the right.

Reduce speed at the crest of a hill, due to limited sight.

Procedures

Observe and heed hill signs.

Increase accelerator pressure to maintain speed, while considering the movement of other traffic.

At the crest of a hill:
  Move to the right
  Reduce accelerator pressure

As you begin to go down a hill, begin to control your vehicle's speed before it becomes too fast for conditions.

Speed control:
  Accelerator up
  Continuous brake pressure
  Shift to lower gear, if necessary

Questions

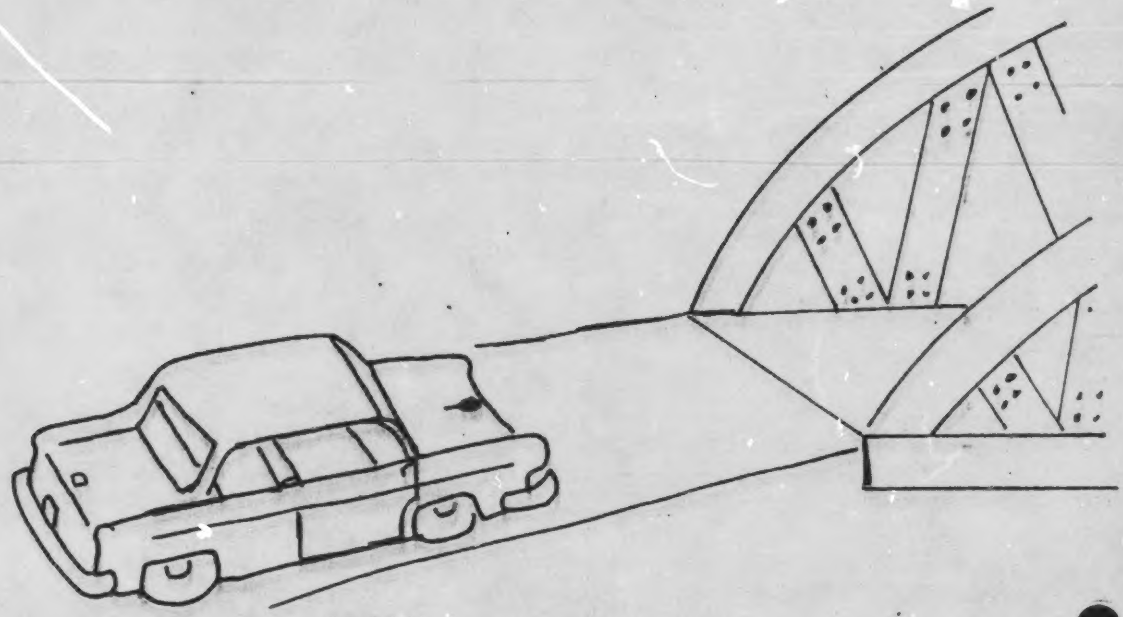
1. Why is it important to scan, or look for buses, trucks, or other slow moving vehicles when approaching a steep hill?
   a. for advance warning of speed adjustment
   b. these large vehicles will clear your path of travel

2. When driving a vehicle down a hill, the best type of brake pressure is:
   a. continuous partial pressure
   b. pumping your brakes

3. As you crest a hill, you should reduce accelerator pressure to:
   a. avoid unnecessary speed
   b. avoid steering problems

4. When approaching the crest of a hill, in order to allow a space cushion between your vehicle and any approaching traffic, you should:
   a. move to the right
   b. stay in the center of the lane
   c. move to the left

5. It is a very unsafe practice, when going down a hill, to:
   a. take your vehicle out of gear
   b. shift down to a lower gear
   c. brake gradually



BRIDGES

Information

You should not stop or park your vehicle on bridges, except in an emergency.

Bridges may be narrower than the regular roadway.

You must be able to maintain lane position more efficiently when driving on a bridge.

Procedures

Observe bridge signs.

Slow down when approaching a bridge.

Remain in the proper driving lane.

Adjust the position of your vehicle to allow for clearance with traffic in the adjacent lane.

Observe posted signs when leaving a bridge.

Questions

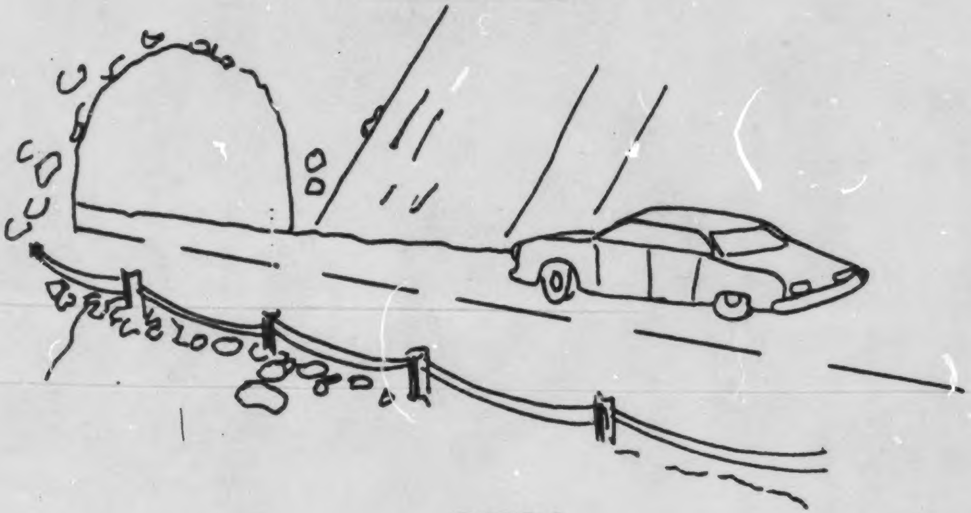
1. When traveling across a bridge, a driver is allowed to stop on the bridge
   a. anytime
   b. never
   c. in case of an emergency

2. When crossing a bridge, a driver should
   a. remain in the center of his lane
   b. move to the right in his lane
   c. move to the left in his lane.

3. Bridges provide problems in driving, because sometimes they are __________ than the highway that you are traveling on.
   a. wider
   b. narrower

WORKSHEET (W13a)
(Page 5 of 7 pages)

June, 1979



TUNNELS

Information

You should not stop, or park your vehicle in a tunnel, except in an emergency.

Tunnels are usually narrower than the roadway.

You must be able to maintain lane position more efficiently when driving through a tunnel.

If you must stop in a tunnel, turn off your engine to reduce carbon monoxide.

Procedure

Look for tunnel signs.

Slow down when approaching a tunnel.

Remain in the proper lane of travel.

If wearing sun glasses, remove them.

Allow space for traffic coming from the opposite direction.

Turn on your head lights in a tunnel, if required.

Observe side structures in a tunnel.

Adjust vehicle speed and position to allow for side structures in a tunnel.

Adjust speed for grade changes.

When leaving a tunnel, observe posted signs.

Turn off your headlights after leaving a tunnel.

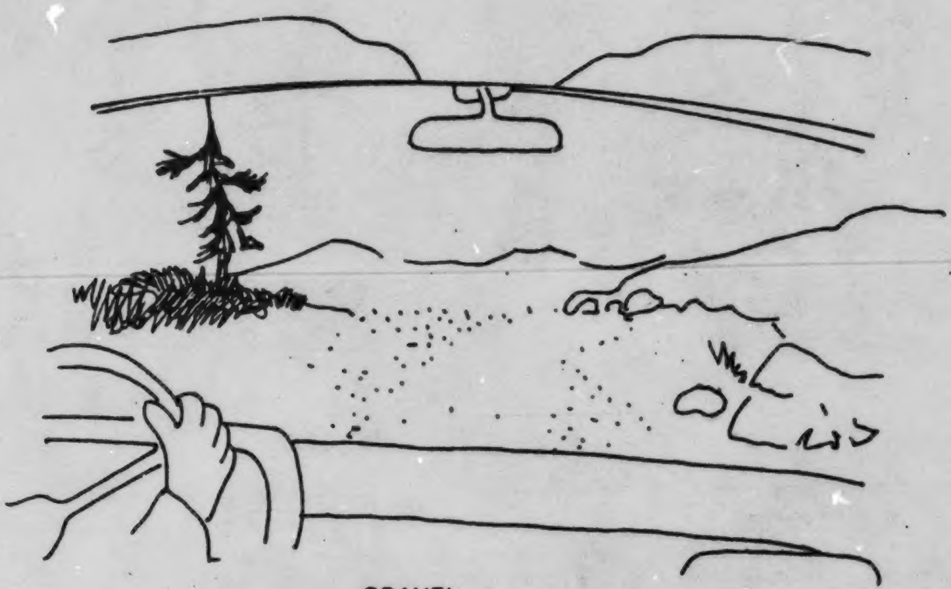
Put on your sun glasses.

Questions

1. If you are wearing sun glasses as you approach an unlighted tunnel, you should remove them as you drive through the tunnel.
   True False

2. Tunnels are often narrower roadways, and therefore take more skill to maintain lane position.
   True False

3. Which of the following would be a justifiable reason for stopping in a tunnel?
   a. an accident in front of you
   b. a flat tire
   c. your windshield wipers fail



GRAVEL

Information

Drive slower than on a dry paved roadway.

More steering adjustments will be required in order to maintain the intended path of travel.

Avoid sharp turning movements.

Reduce speed before encountering gravel surface roadways.

Increase following distance.

Attempt to travel in a roadway position with your tires in the tracks left by previous vehicles.

Care should be taken when crossing the gravel build-up between tire tracks.

Flying bits of gravel may break headlights and windows.

Braking distances will be longer; apply brakes gradually to prevent locking.

Questions

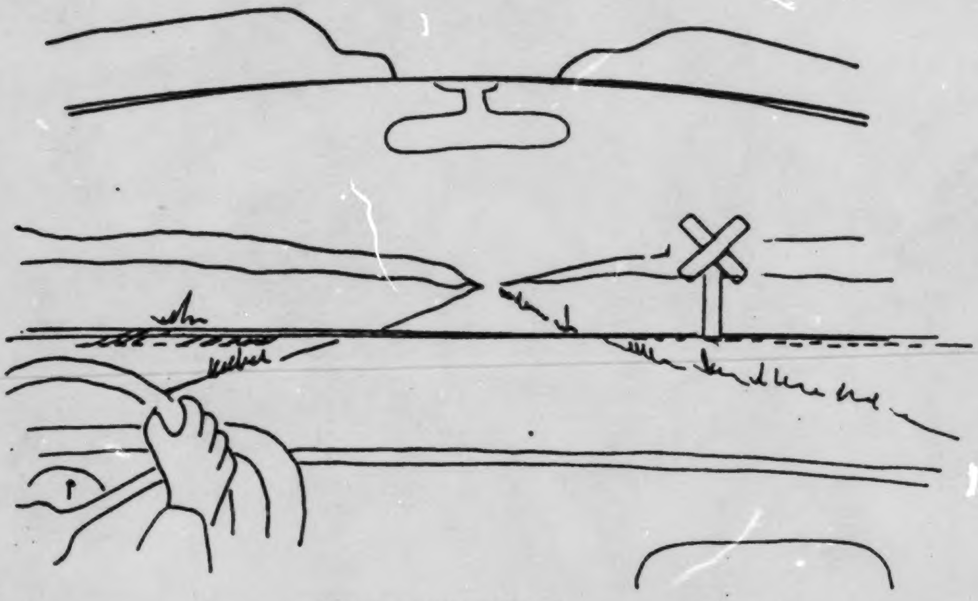
1. Which of the following road surfaces would require the slowest travel speed?
   a. concrete
   b. asphalt
   c. gravel

2. When driving on gravel roads, you should avoid tracking your tires:
   a. in the gravel made by other vehicles
   b. on the ridge of gravel build-up between tire tracks

3. Stopping distances on gravel surfaces compared to concrete surfaces are:
   a. shorter
   b. greater
   c. the same

4. When driving on a gravel surface road, as compared with a concrete surface road, your following distance should be:
   a. increased
   b. decreased
   c. the same

5. Flying particles are a greater hazard on which of the following road surfaces?
   a. concrete
   b. asphalt
   c. gravel



RAILROAD CROSSINGS

Information

Busses and tank trucks carrying explosives or flamable liquids must stop at R. R. crossings.

Most R. R. crossings have only signs to mark their locations.

Mechanical R. R. signals may malfunction.

The first train in multiple track crossings may screen another train coming from the opposite direction.

During poor weather, R. R. crossings may cause vehicle traction problems.

Procedures

Observe signs and traffic controls.

If following a school bus, commercial passenger vehicle, or tank truck, be prepared to stop.

Look in both directions to see if trains are approaching.

If a train is coming, stop 15 to 20 feet from the track.

Proceed across R. R. tracks only after obtaining a clear view of all tracks in both directions.

At multiple track crossings, do not stop on the R. R. tracks.

Questions

1. Which of the following vehicles are not required to stop at all R. R. crossings?
   a. tank trucks
   b. school busses
   c. passenger cars

2. At multiple R. R. track crossings, after a train has passed your stopped vehicle, the greatest danger/hazard to your crossing the tracks is:
   a. stalling the engine
   b. a hidden train coming from the other direction
   c. an oncoming vehicle

3. When approaching a R. R. crossing with mechanical signals, it is not necessary to check to the Left and Right if the signal is not flashing.
   True False

4. When approaching a R. R. crossing, knowing that there is no train approaching, you should still reduce speed because:
   a. the road surface may be rough
   b. the train may be temporarily hidden from your view.

June, 1979

WORKSHEET (W13b)
(Page 1 of 2 pages)

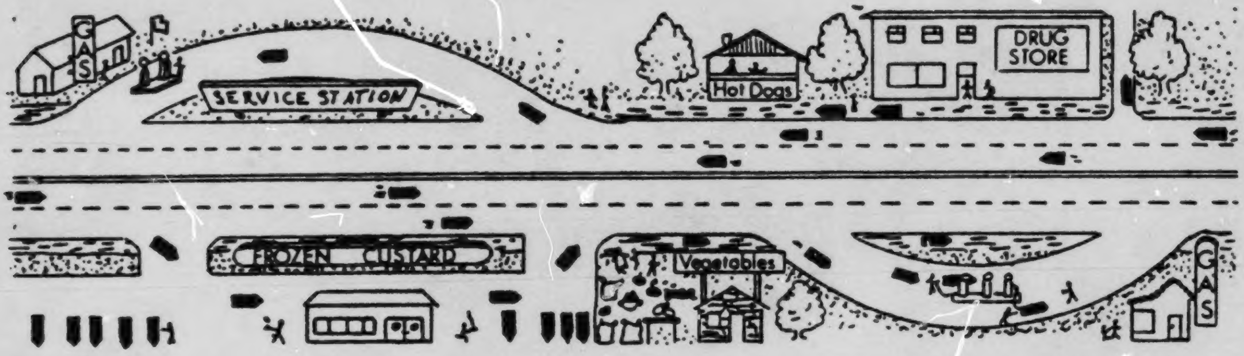
Highway Driving

1. Highway and freeway driving are essentially easier than city driving. Why is that true?

2. Though highway and freeway driving are essentially easier, mistakes are usually more critical. Why is that true?

3. Why is separating hazards especially important in highway driving?

4. The drawing below shows a four-lane highway through a built-up, but "non-city" area. Often the speed limit remains at 55 MPH or is only lowered slightly to 45 or 50 MPH. List four specific hazards or dangers this creates that are not normally found on the open highway.



1). ______________________________

2). ______________________________

3). ______________________________

4). ______________________________

5. What is the purpose of the practice of driving with headlights on in the daytime?

WORKSHEET (W13b) June, 1979
(Page 2 of 2 pages)

6. Describe the particular hazard each of the following present in highway driving:

1). Slow moving trucks:

2). Animals:

3). Meeting long lines of cars on two lane highways:

4). Visibility at rural intersections:

7. Explain how each of the following affect your decision about your space cushion and the speed you choose to travel:

1). Width of the road:

2). Weather:

3). Field of view:

4). The flow of traffic:

EVALUATION: E13a
(Page 1 of 2 pages)

Directions: Write the letter of the correct answer next to the corresponding number on the answer sheet. A total of 8 points is needed to pass.

(Each question is worth one point)

1. If a curve requires reduced speed, when should you slow down?

   a). Before entering the curve.
   b). Just as you enter the curve.
   c). At the sharpest part of the curve.
   d). Gradually the full length of the curve.

2. Which is the best way to control your speed on a downgrade when braking is necessary to keep the car at a safe speed?

   a). Use continuous steady pressure on the brake.
   b). Use intermittent pressure on the brake, letting up periodically so the brakes will cool.
   c). Pump the brakes.
   d). Shift to 2nd or 1st gear as needed.

3. The most common characteristic of bridges that causes problems in driving is:

   a). Bridge surfaces usually are raised higher than the road surface.
   b). The bridge surface breaks up sooner than other road surfaces.
   c). Visibility on bridges is poor, because of the superstructure.
   d). Bridges are usually narrower than the highway.

4. In nearly all tunnels what driving capability must be done more efficiently?

   a). Lane changing.
   b). Passing.
   c). Maintaining lane position.
   d). Maintaining speed control.

5. In vehicle-train accidents at railroad crossings:

   a). More occur in daylight hours rather than at night.
   b). Many more accidents occur at single track crossings rather than multiple track.
   c). More vehicles strike trains than the trains strike vehicles.
   d). More than half the vehicles struck by the train are stalled on the track.

6. When encountering roadway irregularities such as chuckholes, the most important adjustment to be made is:

   a). Reducing speed.
   b). Changing lane position.
   c). Steering quickly.
   d). Releasing brakes while driving through.

7. You should drive slower on a gravel road than on an asphalt surface chiefly because:

   a). At higher speeds the gravel will damage the underside of the car.
   b). More steering adjustments are required to keep in the intended path of travel.
   c). Vehicle control is less because of lesser traction.
   d). Flying gravel may break headlights.

June, 1979

EVALUATION: E13a
(Page 2 of 2 pages)

8. When you speed up from 30 MPH to 55 MPH on a highway, which is made more difficult?
   a). Steering in a straight line.
   b). Accelerating more.
   c). Maintaining a steady speed.
   d). Steering in a straight line.

9. Which is the main reason for driving with headlights on in daytime on the highway?
   a). To see better.
   b). To be seen better by others.
   c). To prevent battery overcharge.
   d). To meet legal requirements.

10. Which is the best highway speed to choose when traffic is moderate to heavy?
   a). A little below the speed limit.
   b). At the speed limit if road conditions are good.
   c). Above the speed of others if the average speed is 10 MPH below the speed limit.
   d). The speed most drivers are using.

June, 1979

MODULE 14: LIMITED VISIBILITY, LESSENED TRACTION

OBJECTIVE

WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS ON LIMITED VISIBILITY AND LESSENED TRACTION AND METHODS FOR COMPENSATING FOR BOTH, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

CONCEPTS

Causes of limited visibility
- Night - dark
- Fog, rain, snow
- Matter on or blocking windows - dirt, frost, condensation, articles in back window
- Vehicle design

Compensation for limited visibility
- Use of lights
- Speed control
- Windshield washer, defroster

Causes of lessened traction
- Ice and snow
- Gravel on roadway
- Hydroplaning
- Compounding of lessened traction by worn tires and speed

Compensation for lessened traction
- Speed control
- Regular and special equipment
- Recognizing and avoiding problem areas
- Winter driving procedures

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ____________________, pp. __________.
2. Independently read pp. 29-49 in the booklet We Drivers.
3. Independently read the pamphlet "Driving During Darkness."
4. In a classroom group setting, view Tire Hydroplaning, What Happens, (16 mm film).
5. Independently complete Worksheet W14a.
6. Independently read Informational Flyer IF14b.
7. In a classroom group setting, participate in a teacher-led discussion on limited visibility and limited traction.
8. Practice driving at night by participating in (a) night driving lesson(s) with the TSE teacher or with parents, using the Informational Flyer IF14c, "Parental Involvement Package for Night Driving."

EVALUATION

1. Complete Evaluation E14.

July, 1979

WORKSHEET W14a
(Page 1 of 2 pages)

Limited Visibility

A. For each of the following conditions, answer these questions: (a) How does or can this condition affect your visibility? (b) What driving adjustments should probably be made? (c) What can you do other than driving adjustments to compensate for this condition?

1. Sun glare.
   a.
   b.
   c.
2. Dusk, twilight.
   a.
   b.
   c.
3. Fog.
   a.
   b.
   c.
4. Rain.
   a.
   b.
   c.
5. Snow.
   a.
   b.

July, 1979

WORKSHEET W14a

(Page 2 of 2 pages)

5. Snow (continued).

   c.

6. Overnight temperature below freezing.

   a.

   b.

   c.

7. Loading a car for a trip.

   a.

   b.

   c.

B. 1a. What are limited visibility factors you encounter when you drive a pickup or van?

   b. How can you compensate for those factors?

   c. What do you think should you do before and during driving a van for the first time?

   d. What added or increased visibility is usually afforded by a pickup or van?

   2. List at least five items that must be kept clean and/or in good working order to provide you with as good a view as possible and/or make your car visible to others in varying conditions.

July, 1979

INFORMATIONAL FLYER IF14b
(Programmed Learning Package)
(Page 1 of 3 pages)

On the following pages you will find in programmed learning form, a description of the causes of skidding or loss of traction and an explanation of hydroplaning and means to be used in preventing hydroplaning.

To gain the most from this package, you should follow the directions below:

The answers to the blanks will be given on the right-hand margin. Cover the answers with a sheet of paper before you begin reading. Then as you read, fill in the blanks and answer the questions in your mind. DO NOT WRITE IN THE BLANKS, so this package can be used by others. If you are not sure of any answer, first go back to the previous paragraph. Your clues to the answer should be in the previous paragraph. If you are still not sure, read on through the paragraph after the blank or question. Your clue could be found after the blank. Once you have decided on an answer, refer to the answer key on the right margin to see if your answer is correct. If it is not correct, make sure you understand why it is not correct, and what the correct answer is before you continue. Most generally, the answers are a clue to the blanks that follow it. Remember that this package is a learning device, and it is not to be considered any form of test.

July, 1979

INFORMATIONAL FLYER IF 14b
(Programmed Learning Package)
(Page 2 of 3 pages)

The causes of skidding (loss of traction) can be divided into three groups: (1) conditions of the road, (2) conditions of the vehicle, and (3) actions of the driver.

(1) Conditions of the Road

a. Ice, snow, or frost
b. Wet road, particularly when the road surface has drops of oil and particles of rubber - watch the first rain after a long dry spell.
c. Wet mud on the road which is found near farm entrances and outside building sites.
d. Packed wet leaves, which occur in the fall.
e. Broken or uneven road surfaces and sand/gravel commonly found on curves.
f. Curves - loss of traction can occur even if the road surface is dry.
Adverse cambers - when the road is banked the wrong way on a curve are dangerous when the surface is slippery.

Snow and ice reduce the traction between your tires and the __________ road
____________________. Reduced ______________ makes it more difficult surface/traction
to control the movement of your vehicle.

(2) Conditions of the Vehicle (mainly brakes and tires)

a. Brakes should be evenly adjusted so that on application of the brakes the vehicle slows down in a straight line. If the vehicle pulls one way or the other, a skid can easily occur. This can be caused by unequal front wheel alignment.
b. Tires should have good tread, and preferably the front and rear pairs should be well matched, and the tire pressure should be correct. If there is a different pressure in one tire from that in the opposite one, the effect can be similar to that of unevenly adjusted brakes because one tire will drag more than the other. A skid can occur with worn or poorly _____________ inflated
tires.

(3) Actions of the Driver (misuse of the four main controls)

a. Steering wheel - sudden steering action on a slippery surface.
b. Accelerator - abrupt or sudden changes in the vehicle's speed. Skids are usually caused by excessive speed.
c. Brakes - panic stops and applying your brakes too hard - especially on hills, curves, or wet surfaces.
d. Clutch - sudden engagement of the clutch when on a slippery surface.
e. Skids are usually caused by excessive speed, coupled with too sharp a turn for the vehicle, usually too sudden acceleration or braking when turning.

Enter curves or turns at moderate ________________ to reduce the chances speeds
of a ___________________. The chances of skidding can be reduced if skid
care is taken when driving on ____________ covered with ___________, ice, roadways o
____________________, water or other material that tends to reduce oil
the road surface ____________________. Curves and turns should be friction

July, 1979

INFORMATIONAL FLYER IF14b
(Programmed Learning Package)
(Page 3 of 3 pages)

entered at a moderate rate of speed and deceleration should be
__________ and smooth in order to __________ the gradual/minimiz
chances of skidding. In addition to driving carefully, vehicle
maintenance can play a role in __________ or minimizing the avoiding
probability of __________. __________ design skidding/Tread
variation in tires, unequal front wheel __________, and alignment
__________ or badly worn tires contribute to skidding. bald
To avoid skids, avoid __________ changes in vehicle velocity or abrupt
__________ when driving on __________ surfaces. Avoid direction/slippe
panic stops and hard __________ if possible. braking

HYDROPLANING

Hydroplaning, as a cause of skids, has only recently been investigated. It takes place while driving on wet roads. At speeds up
to 15 m.p.h., most tires will "wipe" the roadway surface, in much
the same manner as a windshield wiper clears the windshield of up
to about 3/8 inches of water. However, as the speed __________, increases
the tires cannot "wipe" the road as well, and they start to ride up
on the water, just like a set of water skis. In a standard passenger
vehicle, partial hydro__________ starts at about 35 m.p.h. and in- (hydro)planing
creases with speed up to about 55 m.p.h., at which point the tires
can be totally up on the water. In a severe rainstorm, for example,
with less than 1/8 inch of tire tread, the t_____ may not touch the (t)ires
road at 55 m.p.h. If this is the case, there is no f__________ (f)riction
available to brake, accelerate, or corner. A gust of wind, a change
of road camber, or a slight turn can create an unpredictable and uncontrollable skid.

With today's lesser crowned roadways, especially freeways, h__________ (h)ydroplaning
is an increasingly important factor in automobile accidents. Although
usually able to predict hydroplaning, sometimes it is not and you may
find your vehicle in that situation. The best thing to do is to take
your foot off the __________ and allow the vehicle to __________ accelerator/slow
__________. If you skid while your vehicle is only partially hydro- down
planing, you should be able to regain control by correcting (steering
and countersteering) for the particular type of skid that occurs. On
the other hand, if you're totally __________, about all you can do hydroplaning
is release the accelerator and ride out the skid.

To prevent __________, it is most helpful to have good tires hydroplaning
with deep tread, never less than 1/8 inch. The tr_____ allows the (tr)ead
water to escape from under the tires and tends to prevent complete
__________ at normal highway speeds. However, when hydroplaning
the depth of the water exceeds the depth of the tire __________, com- tread
plete hydroplaning can be expected at speeds from 50 - 60 m.p.h.

July, 1979

TEACHER-LED DISCUSSION

(Student Learning Activity 7, Module 14)
(One Page Only)

Limited Visibility

1. Use the students completed Worksheets W14a as the basis for discussion points. Ask the students for the answers they wrote for the various questions.

Limited Traction

The following are questions to ask the students and possible answers.

1. What are the various causes for skidding or loss of traction?

Possible Answer: Road conditions: ice, snow, water, gravel, etc. on the roadway; rough roadway; curves. Condition of car: uneven braking; worn tires; not matched tires in wear or kind. Actions of the driver: sudden steering; abrupt acceleration, excessive speed; braking too hard. Most often there is a combination of the above factors.

2. What is hydroplaning? How can you correct for it?

Possible Answer: Hydroplaning in a car is when the car rides up on the buildup of water on the road surface much like a boat on a lake. Take foot off gas and slow down; do not brake hard; steer and countersteer for skid if necessary. If full hydroplaning, the only thing a driver can do is ride it out.

3. What is the way to approach driving on ice and snow?

Answer: Gently.

4. What are some tips for starting and stopping on ice and snow?

Possible Answers: Accelerate very slowly, use second gear to start out in a standard transmission car, pump brakes, start early for a stop.

5. What are some things you should do to prepare your car for winter driving?

Possible Answers: Engine tune-up, heater and defroster in good working order, antifreeze in radiator, snow tires, chains, snow brush, ice scraper, carry sand.

6. Where might you find slick patches on otherwise bare and dry roads?

Possible Answers: Shaded areas (by trees, buildings, etc.), bridge or overpass surfaces.

July, 1979

INFORMATIONAL FLYER IF14c
Parental Involvement Package for Night Driving
(Page 1 of 4 pages)

In the next several years, your teenager will do much of his/her driving at night and, as in all aspects of driving, he/she should have preparation for this. You can help augment the development of your son/daughter's driving ability at night by providing a formal night driving experience. The following pages outline lessons for you to follow if you chose to provide this experience.

Directions to Parents:

What and When:

The experiences you will need to provide for your beginning driver for night driving are grouped into three lessons (times out in the family vehicle). The first lesson which is actually given in daylight, should be given when the new driver has completed about 1/2 to 2/3 of the high school traffic safety education program. The second lesson should be given within one week of the first, and the third lesson within a week of the second. If you have been giving your child driving experience during the entire course, you may feel that the first lesson could be eliminated, but it is important to travel the route under daylight conditions to familiarize the driver and to provide direct comparisons of day and night driving over the same route.

You will need to become familiar with the purposes, preparation, and experiences provided with each lesson prior to going out with your beginning driver. You'll need to be quick at using the checksheet during lesson 1. Since the second lesson is given during darkness, you'll have to be familiar with each driving experience. No light will be available to read with as you go along. Besides, reading with a beginning driver at the wheel isn't considered a safe practice.

Where:

The first lesson should be given on a low congested highway and streets which you are familiar with, but your beginning driver is not. You might begin the lesson from your home or at a safe point along the way to the route you will use for the lesson.

The selected route should include stop signs, right and left turns, and speed limits over 30 miles per hour. The route should take at least 30 minutes.

Near the end of the first lesson, have the beginning driver find and operate the windshield wiper control, dimmer switch, headlight switch, and daylight/night time rear view mirror control WITHOUT LOOKING AT THEM.

The second lesson will include several experiences. Most will be easy to provide, but some may not present themselves during the lesson (i.e. being followed). The second lesson is given on the same route as the first, but the entire second lesson is given at night. Provide as many experiences as possible that are suggested in this package, and discuss those experiences with your beginning driver as he drives the route and/or immediately following the lesson.

Note: No other members of the family, or friends, should be in the vehicle when the night lesson is being given for the first time.

LESSON #1 Preparing for Night Driving

Purposes:

1. To determine if your beginning driver's skills are good enough to be exposed to night driving.
2. To permit the beginning driver a chance to go over a route in daylight wh will later be traveled at night to permit comparisons.
3. To familiarize the beginning driver with driving controls in the family vehicle

July, 1979

INFORMATIONAL FLYER IF14c
Parental Involvement Package for Night Driving
(Page 2 of 4 pages)

Preparation:

1. Read the experiences you will provide during the lesson and look over the driving checksheet ahead of time.
2. Select a local route which will permit you to evaluate the driving skill on the checksheet. See "Where" under "Directions to Parents" for just what the route should include.
3. Plan an appropriate time with your beginning driver when you both will be alert.
4. Discuss the purposes of the driving lesson with the driver before the lesson, but do not discuss the exact route.

Experiences you should provide:

1. Thirty minutes (minimum) of travel over a route somewhat unfamiliar to the beginning driver. Driving skills are evaluated and scored on the following check list.

DRIVING SKILL CHECKSHEET

Directions: Check each item as the driver performs it and complete it after the route has been driven. Note: Don't take your eyes off the road for any length of time. If necessary, take care of the checksheet at the end of the drive.

Accelerates smoothly______
Brakes and stops smoothly______
Looks far ahead in lane______
Uses mirrors frequently______
Centers vehicle in lane______
Follows at a safe distance______
Yields right-of-way______
Right turns safely______
Left turns safely______
Signals intentions______
Good reactions to traffic______
Maintains reasonable speed______
Locates dimmer switch______
Locates wiper control______
Locates mirror control______

2. Near the end of the lesson, have the beginning driver become familiar with the light switch, dimmer switch, windshield wiper control, and daylight/night rear view mirror control by finding and operating them without looking at them.
3. At the conclusion of the lesson, discuss how well the driving was performed. Mention good points first. For minor errors, suggest ways to improve, but for the major problems refer them to the traffic safety education teacher for further instruction. The beginning driver should do well on all skills before night driving is undertaken.

LESSON #2 Night Driving

Purpose: To give a planned and practical night driving experience for your beginning driver.

Preparation:

1. Set up a time when you and your beginning driver will be free from other obligations. This driving experience should be undertaken in a relaxed atmosphere.
2. Select a local route which your beginning driver has driven before (the same route as in Lesson #1 if following this entire package). Look under "Where" in the "Directions to Parents" for just what the route should include.
3. Have in mind those experiences that need to be covered.

July, 1979

INFORMATIONAL FLYER IF14c
Parental Involvement Package for Night Driving
(Page 3 of 4 pages)

Precautions you should remind the beginning driver about before starting:

1. The difficulties in identifying normal landmarks, such as buildings, hills, etc. that can be seen during daylight hours, but are wiped out at night.
2. Due to less vision, slower speeds are needed at night.
3. Pre-drive checks and use of controls and devices under limited light.
4. Distractions inside the vehicle, followed and being followed, meeting oncoming traffic, and city driving.
5. It is illegal to operate a car with only the parking lights on.

Experiences you should provide:

Experience 1: Pre-drive checks

1. Make sure your beginning driver checks the exterior lights (headlights, tail lights) to make certain that they are working and clean and have him be sure the windshield and windows are clean.
2. Before starting out, the beginning driver should locate gauges, controls, and devices inside the car (light switch, parking lights, headlights, dimmer switch wipers, adjusting dash lights, etc.)

Experience 2: Use of Controls

When you first start out, have your beginning driver again operate the dimmer switch, directional signal, and wipers, and adjust the dash lights, and the day/night lever on the rear view mirror without looking at them.

Experience 3: Visual Habits

Direct your beginning driver's vision to the fringe area at the end of the headlight beam, rather than in the brightly lit area.

Experience 4: Distractions inside the vehicle

Have your beginning driver experience the loss of vision due to a lighted object inside the vehicle. Example - dome light on, lighted match, and/or bright dash lights. Note: Prepare your beginning driver for this experience in advance and do it only when there is not other traffic around.

Experience 5: Following others

You might explain that the distance between the tail lights of the vehicle ahead and, to a lesser degree, their brightness are the cues that your beginning driver can use to determine his distance from that vehicle. A driver can tell if he is closing with the vehicle ahead as the tail lights begin to brighten and appear farther apart.

Point out:
(1) That your beginning driver should dim his/her headlights as he/she comes up behind a vehicle at the furthest point to which the high beams are able to reach.
(2) Drivers should follow at a greater distance at night because it is harder to detect slowing action of vehicles at night.
(3) Judging the following distance behind small vehicles and cycles at night can present a special problem at night.

Experience 6: On-coming

Night time driving has at least one advantage, in that approaching vehicles can often be detected at a greater distance than they can be detected in daylight.

July, 1979

INFORMATIONAL FLYER IF14c
Parental Involvement Package for Night Driving
(Page 4 of 4 pages)

1. Point out at what point, or time, your beginning driver should have his headlights dimmed. On a straight away, the oncoming vehicle's headlights will appear as one, but as the oncoming vehicle gets closer, his headlights will separate. At this point, your beginning driver should have his lights on dim.
2. Emphasize that a moment of nearly complete blindness occurs just as the approaching vehicle darts past. In order to cut down on some of this glare trouble, your beginning driver should look at the right road edge. One problem that most night drivers have is that they tend to shy away from the oncoming vehicle which could possibly cause them to go off the road.
3. A common practice (not acceptable to some people or agencies), if an oncoming vehicle has his bright lights on, is to flick the headlights. If the oncoming vehicle still doesn't dim his headlights, make sure your beginning driver keeps his lights on dim and then reduces his speed more than normal.

Experience 7: Being followed

1. Your beginning driver should experience having a vehicle follow him. He should experience the effects of that vehicle's headlights on the rear view mirrors. It may be necessary for your beginning driver to adjust the inside rear view mirror to the night position. Caution him concerning the danger in trying to judge distance to the rear when the mirror is in the night position. It might be wise to switch back to the day position when there is no longer a vehicle following you.
2. Vehicle passing - if a vehicle is attempting to pass you, the driver may flick his headlights to indicate the pass. Be sure your beginning driver dims his headlights as the passing vehicle pulls alongside.

Experience 8: Parking off highway

Have your beginning driver pick a safe place where he can get the vehicle completely off the pavement and instruct him to activate the emergency flashers (hazard lights).

LESSON #3 (You may wish simply to include this at the end of Lesson #2.)

Have the beginning driver drive at night on an unfamiliar route which includes residential and business district driving.

Experiences you should provide:

1. The route should include traffic lights so the beginning driver can experience how they blend into the background of all the other lights.
2. Special attention should be given to the greater problem of identifying pedestrians at night.
3. The route should be planned to allow the student to experience varying intensities of lighting provided by street lights in business and residential areas.

July, 1979

EVALUATION E14a
(Page 1 of 2 pages)

Directions: Write the letters of the correct answers on the separate answer sheet. A total of 8 points is needed to pass.

(All questions worth 1 point each)

1. At night, you are overdriving your headlights if the lighted areas ahead of your car:
   a). Equals your total stopping distance.
   b). Is longer than your total stopping distance.
   c). Is less than your braking distance.
   d). Is less than your total stopping distance.
2. Which is the best way to "ask" an oncoming driver to lower his headlight beam?
   a). Sound your horn.
   b). Switch to high beam and wait.
   c). Switch to high beam and back to low.
   d). Turn your headlights quickly off and on.
3. In cold weather, where is a driver most likely to find ice when the rest of the pavement is dry?
   a). On hills.
   b). On curves.
   c). On bridges.
   d). On approaches to intersections.
4. Where should you look when you are meeting a driver who has his bright lights on?
   a). At the right edge of the road and check center line.
   b). Steadily at the right edge of the road.
   c). At the center line near his car.
   d). Directly down your lane of travel.
5. If your car begins to skid, you should:
   a). Brake firmly.
   b). Pump your brakes.
   c). Steer in the direction the rear end is skidding.
   d). Accelerate gently.
6. Which of these situations would be the least likely to produce a skid?
   a). Braking abruptly.
   b). Pumping the brakes.
   c). Driving at high speed on curves.
   d). Accelerating rapidly.
7. Which of the following factors would be most important in choosing a safe speed for driving in fog?
   a). How far you can see.
   b). How good your car's brakes are.
   c). The amount of traffic on the road.
   d). Whether it is day or night.

8. A car which is riding on a film of water that builds up between its tires and the pavement is:

   a). Surging.
   b). Skidding.
   c). Hydroplaning.
   d). Hydrofoiling.

9. As the friction between a vehicle's tires and the road surface decreases, the chance of skidding:

   a). Increase.
   b). Decrease.
   c). Are not substantially changed.
   d). Increase only on wet or icy roads.

10. When driving through fog at night, a driver should use:

   a). Low-beam headlights.
   b). High-beam headlights.
   c). Parking lights.
   d). Four-way flashers and low-beam headlights.

June, 1979

MODULE 15: SPECIAL DRIVING CONDITIONS

OBJECTIVE WHEN PRESENTED WITH ESSAY QUESTIONS ON SPECIAL DRIVING CONDITIONS, THE STUDENT WILL RESPOND WITH VALID ITEMS FOR HANDLING THOSE CONDITIONS.

CONCEPTS Driving:

In extreme hot weather.
In extreme cold weather.
In a strong wind.
On steep grades.

STUDENT LEARNING ACTIVITIES

1. In small groups of 2-4, complete Worksheet W15a.
2. In a classroom group setting, participate in a teacher-led discussion using Worksheet W15a.

EVALUATION

1. Complete Evaluation E15a.

June, 1979

WORKSHEET (W15a)

(Page 1 of 4 pages)

Directions: In the following, describe what should be done in preparing a vehicle for driving in the conditions listed for these seven items: 1. Cooling system, 2. Tires, 3. Vision, 4. Heating, venting, air conditioning systems, 5. Fuel, 6. Special equipment, 7. Braking.

A. Extremely Hot Weather

B. Extremely Cold Weather

C. Strong Winds

D. Steep Grades

Directions: Describe what precautions or driving adjustments whould be made by a driver for the conditions listed for these seven items: 1. Speed control, 2. Vision, 3. Traction, 4. Space, 5. Following distance, 6. Sufficient time, 7. Braking.

A. Extreme Hot Weather

B. Extreme Cold Weather

C. Strong Winds

D. Steep Grades

June, 1979

EVALUATION: E15a
(One Page Only)

Directions: Answer the questions in your own words. To pass, the student must make at least 3 valid points for each question.

1. What would you do in preparing your car for a trip through a desert in extremely hot weather?

2. What can you do to help insure an efficient and safe ride for short trips in extreme cold weather?

3. What considerations need to be made either in terms of the car or driving adjustments if the car is being driven on steep grades?

5/79

MODULE 16: VEHICLE CHARACTERISTICS, MOTORCYCLE AWARENESS, NON-MOTORIZED TRAFFIC

OBJECTIVE

WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS ON SPECIAL VEHICLE CHARACTERISTICS, MOTORCYCLE AWARENESS, AND INTERACTING WITH NON-MOTORIZED HIGHWAY USERS, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

CONCEPTS

Vehicle classes: Standard passenger cars, compacts, sports cars, trucks and buses, motorcycles, recreational vehicles, farm vehicles.
Vehicle performance capabilities and other characteristics.
Attitudes related to motorcycles and their operators.
Advantages and disadvantages of motorcycles compared to automobiles.
Reasons why motorcycle operators maneuver within their own lane of travel.
Why automobile drivers usually cause intersection collisions between cars and motorcycles.
Interaction with motorcycles while performing traffic flow tasks.
Bicyclists.
Animals.
Pedestrians: Types, responsibilities.

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ________________, pp. __________.
2. Independently read pamphlets, "Eye That Cycle, Tip for Drivers," "The Invisible Vehicle," "Sharing the Roadway," and "Sharing the Road with Trucks."
3. In a classroom group setting, view How To Tell Your Car About Motorcycles (FS,C) and participate in a teacher-led discussion on the film.
4. In a classroom group setting, view overhead Transparence Set T16a, complete Worksheet W16a, and participate in a teacher-led discussion on the Worksheet.
5. Independently complete Worksheets W16b and W16c.

EVALUATION

1. Complete Evaluation E16.

TEACHER-LED DISCUSSION
(Student Learning Activity 3, Module 16)
(Page 1 of 2 pages)

The following questions are posed near the end of the FS program "How to Tell Your Car About Motorcycles" in frames 145 to 155. Be prepared to stop the tape and filmstrip at each frame after the question has been asked, and get the answers and why's from the students. Note that the answers given here for why are possible answers that should come out, but are not the only answers.

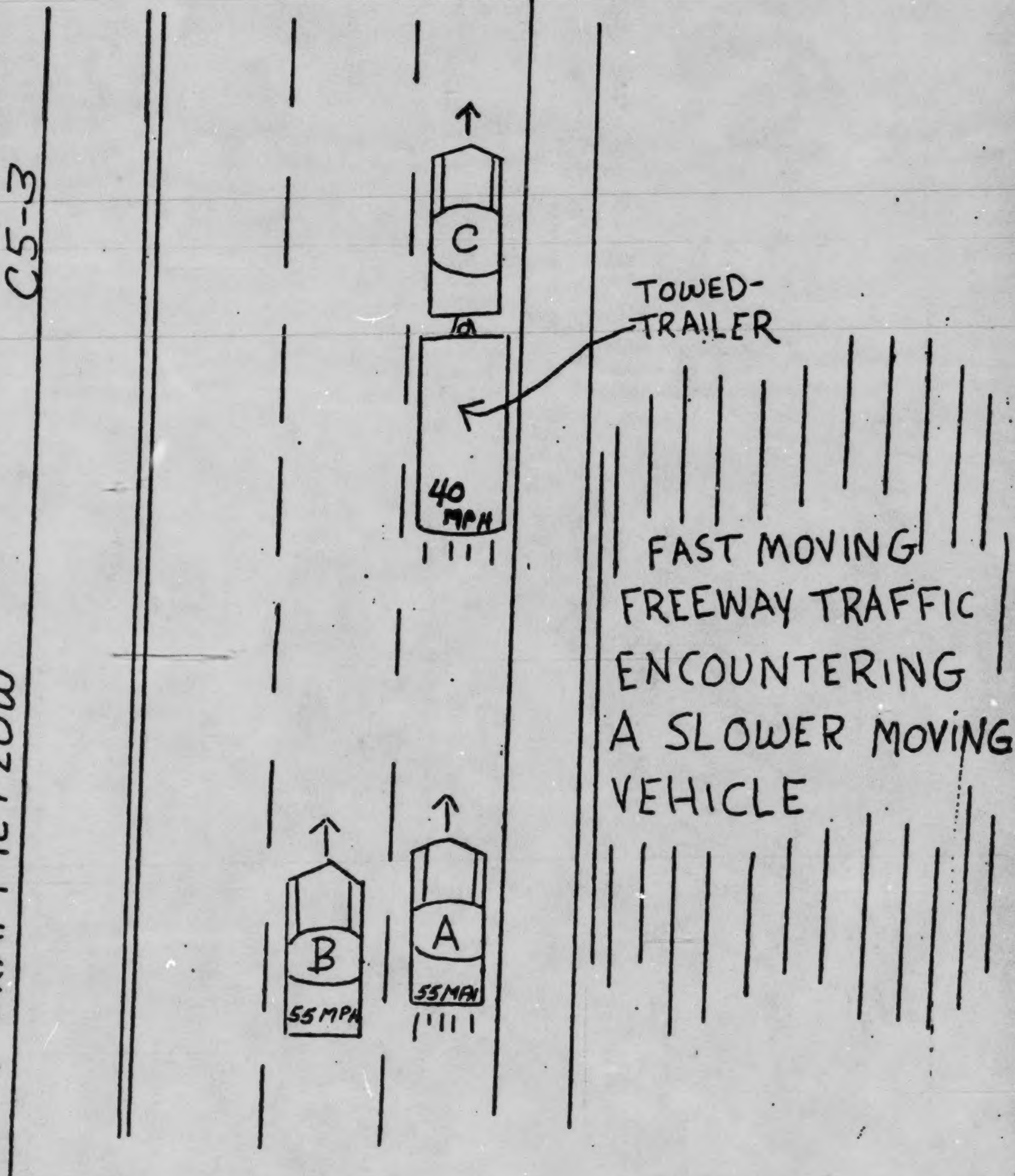
Frame & Question	Answer	Why?
145, 146, 147 - Who is more vulnerable to accident and injury on the highway, the motorcyclist or the motorist?	The motorcyclist.	Less protection of vehicle around him/her. Motorcycle harder to see, thus more susceptible to being run into or turned in front of. Motorcycle is less stable
148 Who is at fault in most automobile/motorcycle collisions? The car driver or the motorcyclist?	The car driver.	Motorists fail to see the smaller motorcycle. Motorists are unaware of motorcycle capabilities.
149 Where do most collisions take place?	Intersections.	More conflict of traffic crossing paths. More for motorist to watch, therefore, making motorcycle even more "invisible" to the motorist. More congestion--tendency of vehicles to crowd.
150 Which position is the standard riding position for the motorcyclist?	The left tire track or left one-third of the lane.	Center of lane usually has oil on it from cars. Most visibility afforded to motorcyclists of the traffic scene. Away from parked cars and possible opening of doors. More visibility of motorcycle by oncoming cars.
151 What is wrong in this situation?	The car and the motorcycle should not be in the same lane.	The motorcycle is a vehicle and is entitled to full lane. Motorcyclist should not drive through a gap like this even though small enough to do so--dangerous trap.
152 Who has the right of way in this situation?	The motorcyclist.	Any vehicle would have the right-of-way--so also should the motorcycle then.
153 How close should you drive behind a motorcycle?	Follow at two seconds.	Same established safe following distance on dry pavement as in following other vehicles.

TEACHER-LED DISCUSSION
(Page 2 of 2 pages)
SLA 3, Module 16

Frame & Question		Answer	Why?
154	Why is it best for the motorcyclist to travel on the right side of his lane in this situation?	He is more visible to the van driver in this lane position	Motorcycle may be in van's blind spot if travelling in the usual left tire track.
155	How might the condition of the road surface affect the riding pattern of the motorcyclist?	There may be a steel grating road surface on the bridge and the motorcyclist may weave within his lane.	--

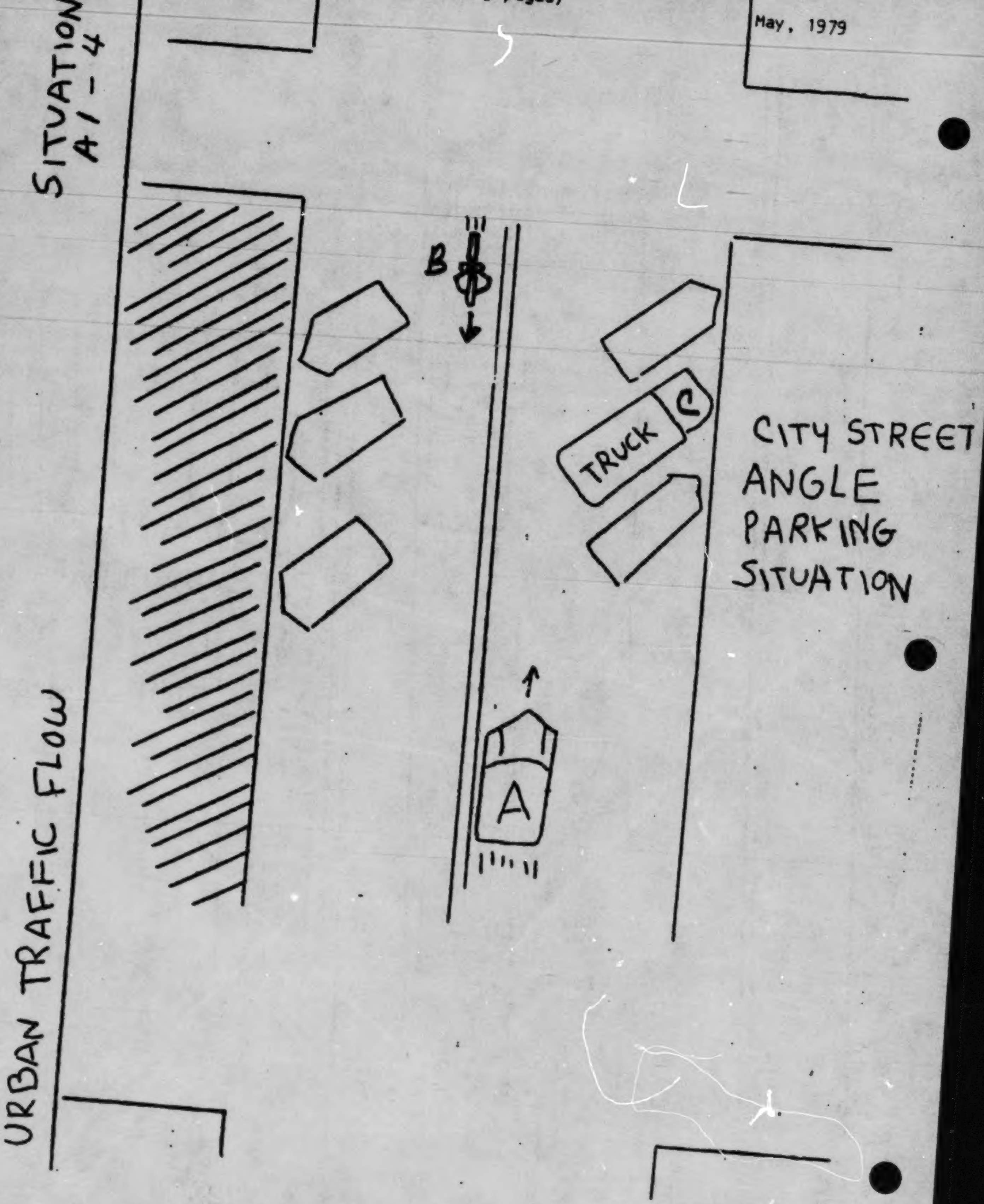
Once discussion on the above is completed, let the FS/C finish.

SITUATION C5-3


FREEWAY TRAFFIC FLOW
C
TOWED-TRAILER
40 MPH
B
55 MPH
A
55 MPH

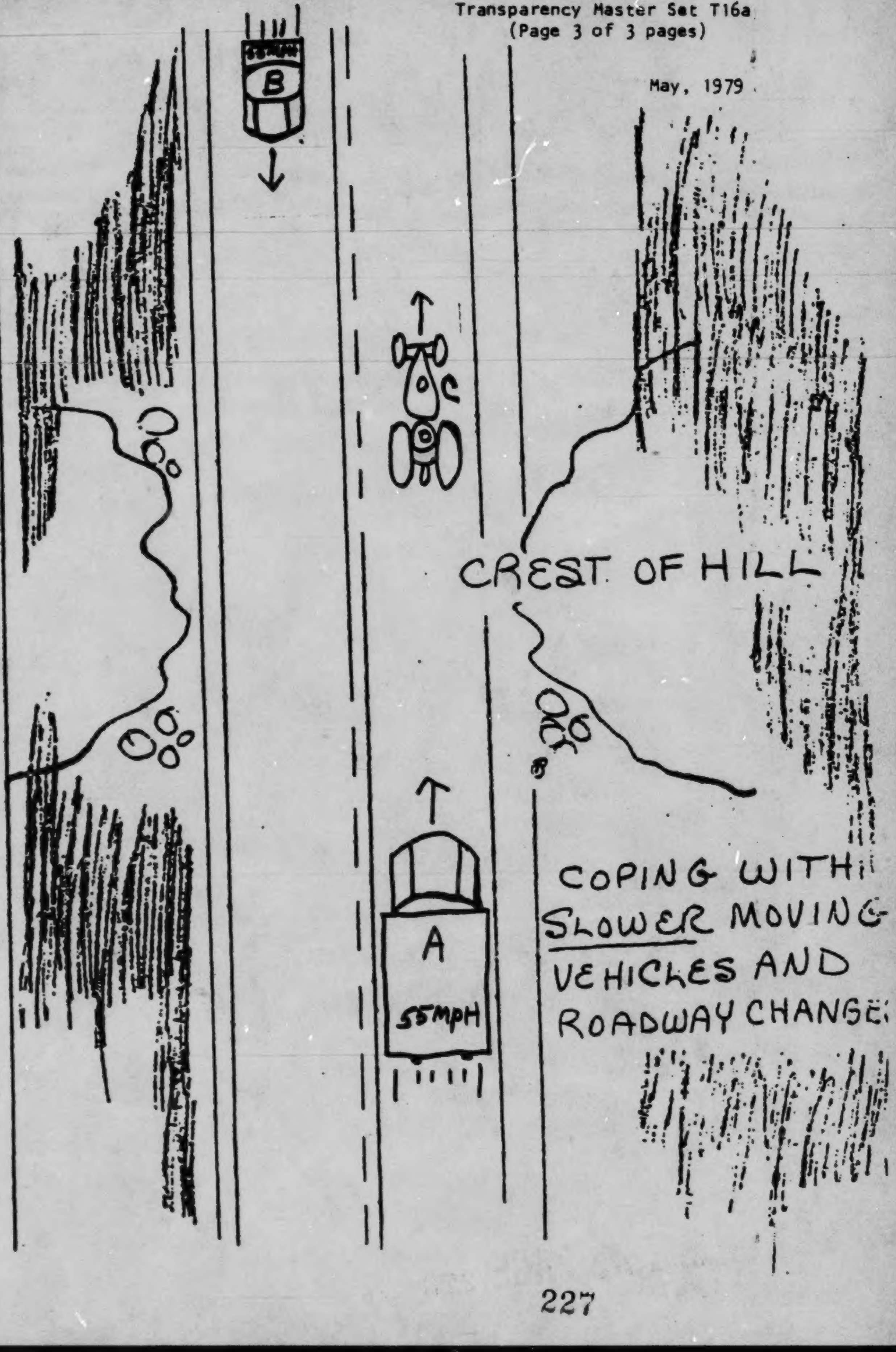
FAST MOVING FREEWAY TRAFFIC ENCOUNTERING A SLOWER MOVING VEHICLE

30.


SITUATION
A1-4
B
TRUCK
C
A
CITY STREET
ANGLE
PARKING
SITUATION
URBAN TRAFFIC FLOW

May, 1979

RURAL TRAFFIC FLOW SITUATION B3-5


B
55MPH
C
CREST OF HILL
A
55MPH

COPING WITH
SLOWER MOVING
VEHICLES AND
ROADWAY CHANGES

May, 1979

WORKSHEET W16a
(Page 1 of 2 pages)

Directions: On viewing each of the transparencies of different types of traffic situations involving vehicles with varying characteristics, the student will rate the vehicles indicated in relation to all other vehicles in the areas requested using the following scale: 5 best, 4, 3 average, 2, 1 poorest. The student will also answer the questions asked about each situation in regard to varying vehicle characteristics.

1. Situation C5-3 -- Fast moving freeway traffic encountering a slower-moving vehicle. Both A and B are mid-size vehicles.

	Vehicles A & B	Vehicle C
Acceleration		
Deceleration		
Maneuverability		
Stability		
Driver Visibility		

a. What considerations concerning vehicle characteristics should be given by the driver of Vehicle A in negotiating this situation?

b. If the positions of vehicles A & C were reversed, what differences would there be for driver C in negotiating this situation?

c. What common considerations should be given by all drivers for a vehicle such as vehicle C?

2. Situation A1-4 -- Vehicle A (a full-size passenger car) is approaching Vehicle C (a truck), that is backing out of an angle parking space. There is a motorcycle (Vehicle B) approaching in the opposite direction.

	Vehicle A	Vehicle B	Vehicle C
Acceleration			
Deceleration			
Braking			
Maneuverability			
Stability			
Driver Visibility			

a. What considerations concerning vehicle characteristics should be given by the driver of Vehicle A in negotiating this situation?

Vehicle B?

b. If the positions of Vehicles A and B were reversed, what differences would there be for Vehicle B in negotiating this situation?

Vehicle A?

May, 1979

WORKSHEET W16a
(Page 2 of 2 pages)

c. What common considerations should be given by all drivers for a vehicle such Vehicle B (motorcycle)?

d. What differences result in regard to vehicle characteristics if Vehicle C was a standard car rather than a truck?

3. Situation B3-5 -- Vehicle A (Camper) is approaching a crest of a hill travelling 55 MPH. On the other side of the hill is Vehicle C (slow-moving tractor). Coming up the hill in the opposite lane is a sub-compact car (Vehicle B).

	Vehicle A	Vehicle B	Vehicle C
Acceleration			
Deceleration			
Braking			
Maneuverability			
Stability			
Driver Visibility			

a. What problems regarding vehicle characteristics will the driver of Vehicle A have once it tops the hill and sees the tractor?

b. What advantage is gained regarding vehicle characteristics because Vehicle B is a sub-compact car?

c. Would the situation be less critical or more critical if Vehicles A and B were reversed? Why?

d. Considering the characteristics of the tractor, what different procedures should the driver take to minimize conflic situations?

May, 1979

WORKSHEET W16b
(Page 1 of 2 pages)

1. It is obvious that attitudes vary considerably about motorcycles and their operators. Which of the following statements are true? Place an "x" in front of the true statements.

   ____ Negative attitudes about motorcycles and their operators are usually based upon documented research.

   ____ Prejudice and stereotyping are usually the reasons for negative attitudes about motorcycles and their operators.

   ____ Motorcycle enthusiasts are all daredevils and cannot be trusted.

   ____ Motorcycle enthusiasts are interested in motorcycles for a wide variety of reasons.

2. Which of the following items are advantages of motorcycles compared to automobiles? Place an "x" in front of any item that you would consider as an advantage of a motorcycle.

   ____ Provides more crash protection.

   ____ Provides more comfort.

   ____ Provides more protection from inclement weather.

   ____ Excellent gas mileage.

   ____ Most energy efficient for single person to travel.

   ____ More stability for emergency maneuvers.

   ____ Requires coordination of hands and feet to control and operate.

   ____ Fun to drive.

   ____ Requires a narrow escape path to avoid collisions.

   ____ Needs little space for parking.

3. When comparing performance abilities of automobiles and motorcycles, place an "x" in front of the vehicle that performs best in the indentified situations.

   A. Acceleration

   ____ Motorcycle ____ Automobile

   B. Braking on wet surface

   ____ Motorcycle ____ Automobile

   C. Braking on a dry survace and an expert rider.

   ____ Motorcycle ____ Automobile

   D. Maneuverability at low speeds.

   ____ Motorcycle ____ Automobile

   E. Maneuverability at high speeds.

   ____ Motorcycle ____ Automobile

May, 1979

WORKSHEET W16b
(Page 2 of 2 pages)

4. From the following list of situations, place an "x" in front of those which are appropriate for the motorcyclist to move out of the left tire track of his lane.

____ To pass a car on the right.

____ To make yourself more visable to cars you are vehind in a lane to your right.

____ To cross a railroad track.

____ To make a left turn.

____ To make a right turn.

5. Motorcycle - Automobile collisions at intersections are often caused by automobile drivers. Which of the following statements cause this situation? Place an "x" in front of your choices.

____ Motorcycles are easy to see.

____ It is difficult to judge the speed of an approaching motorcycle.

____ Motorcyclists are always speeding.

____ Turn signals on motorcycles do not cancel automatically.

____ Automobile drivers are not used to looking for motorcycles in right-of-way situations.

____ Motorcyclists are high risk drivers.

____ Motorcycles are small vehicles and are more difficult to see than larger vehicles.

May, 1979

WORKSHEET W16c
(One page only)

1. What is the meaning of a pedestrian carrying a white cane? How does that change possible actions by you as a driver?

2. What precautions should you take when approaching a person on horseback on the roadway?

3. Explain the right-of-way rule for pedestrians at:
   a. Unmarked intersections
   b. Marked intersections
   c. Jaywalking

4. What laws govern bicycle riders for right-of-way at intersections?

5. In the following traffic environments, which two parts of the so-called 5-way pedestrian defense system (attention, seeing habits, car placement, communication, speed control) would be most important for drivers to use in each situation?
   a. Parked cars on residential street
   b. Driving on a gravel county road
   c. Residential street - children in the yard
   d. Business area at dusk
   e. Pedestrians waiting to cross at intersections

6. Traffic laws are usually considered as applying to drivers. But they apply equally as well to pedestrians. Why do you think that should be so?

May, 1979

EVALUATION E16a
(Page 1 of 2 pages)

Directions: Write the letters of the correct answers on the separate answer sheet. A total of 8 points is needed to pass.

(All questions 1 point each)

1. Interacting with a car pulling a trailer requires that a driver predict differently because:
   - a). Cars pulling trailers are slower than other traffic.
   - b). Cars pulling trailers cannot accelerate quickly even though deceleration is about the same.
   - c). The bulkiness of the car trailer combination makes it less maneuverable.
   - d). Drivers of cars pulling trailers usually forget they have the trailer behind them.

2. You should follow a truck at more than the usual following distance:
   - a). Because a truck's deceleration is quicker than a car because of the standard transmission.
   - b). Because often visibility to the front is blocked by the bulkiness of the truck.
   - c). To provide more room for a passing maneuver since the truck is longer than other vehicles.
   - d). To allow for the necessary wider turns by the truck.

3. When we say "special vehicle characteristics" we usually mean:
   - a). Acceleration and deceleration capabilities only.
   - b). Those capabilities of a vehicle which are different from that of an "average" or "standard" car.
   - c). The maneuverability and cornering ability and mechanical condition of the vehicle.
   - d). The design of the vehicle.

4. Which of the following is one of the usual causes of motorcycle-automobile collisions at intersections?
   - a). Motorcycle's turn signals left on.
   - b). Motorcycles usually travel faster than cars.
   - c). Automobile drivers assert the right of way because their vehicles are larger.
   - d). The difficulty of judging the speed of an approaching motorcycle.

5. The statement that automobile drivers make most often after a collision with a motorcycle is:
   - a). "I thought he saw me."
   - b). "I didn't see him."
   - c). "The motorcycle was going too fast."
   - d). "Motorcycles are a menace on the highways."

6. Who is legally at fault in most automobile/motorcycle collisions?
   - a). The motorcyclist.
   - b). The automobile driver.
   - c). Both about equally at fault.
   - d). Used to be the automobile driver, but now is the motorcyclist.

7. Under normal conditions, what is considered to be a safe following distance behind a motorcycle?

   a). 3 seconds, more than behind other vehicles because motorcycles have a shorter stopping distance.
   b). From 2 to 4 seconds, depending on the size of the motorcycle.
   c). 20 feet for each 10 MPH, but never closer than 60 feet.
   d). 2 seconds, same established safe following distance as in following other vehicles.

8. The motorist's responsibility is greater than the pedestrian's because:

   a). Pedestrians always have the right-of-way.
   b). Motorists usually have the right-of-way.
   c). Pedestrians usually neglect their own responsibilities to stay out of the way of moving vehicles.
   d). Of the motorist's responsibility to have the vehicle under control at all times.

9. The two locations where pedestrian deaths and injuries occur most often are:

   a). At intersections and between intersections.
   b). At intersections and near parks and playgrounds during the summer.
   c). At intersections and in the area where persons are getting out of vehicles.
   d). Between intersections and areas where children play in the streets.

10. Bicycle riders:

    a). Have the right-of-way over other vehicles.
    b). May not ride on a heavily traveled road.
    c). Are subject to the same rules as motor vehicles.
    d). Must ride against the flow of traffic so they can see and be seen.

July, 1979

MODULE 17: INTERNAL AND PHYSICAL FACTORS, ALCOHOL AND OTHER DRUGS

(Page 1 of 2 pages)

OBJECTIVE

WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS ON INTERNAL FACTORS, ATTITUDE, ALCOHOL AND OTHER DRUGS, AND PHYSICAL FACTORS, AND HOW THEY CAN EFFECT DRIVING PERFORMANCE, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

WHILE ENROLLED IN THE DRIVER EDUCATION COURSE, THE STUDENT WILL EXHIBIT DUE RESPECT FOR THE LAWS GOVERNING THE HIGHWAY TRANSPORTATION SYSTEM.

IN CLASS, THE STUDENT WILL PARTICIPATE IN ACTIVITIES IN WHICH THE STUDENT WILL IDENTIFY THEIR PERSONALITY FACTORS AND OUTSIDE FORCES WHICH ARE ASSETS AND WHICH ARE LIABILITIES; CLARIFY THEIR VALUES IN REGARD TO RISK ACCEPTANCE AS RELATED TO INTERNAL AND PHYSICAL FACTORS AND ALCOHOL AND OTHER DRUGS; SUGGEST APPROPRIATE ACTIONS FOR SITUATIONS INVOLVING ALCOHOL, DRUGS AND DRIVING; AND SUGGEST WAYS FOR CORRECTING OR COMPENSATING FOR INTERNAL AND PHYSICAL FACTORS.

CONCEPTS

Attitudes and Values
Driver Irritations
Emotions
Maturity
Motivations
Peer Influence
Personal/Social Needs
Self Control
Risk Assessment and Acceptance
Control of or Compensation for Internal Factors
Effects of Alcohol and/or Drugs on Highway User Performance
Alcohol Problems in Traffic Safety
Implied Consent Law and Blood Alcohol Level
Influence of Human Characteristics on Use and Effects of Alcohol and/or Drugs
Use and Abuse of Alcohol and Drugs
Legal Drugs -- Over-the-Counter and Prescription
Illegal Drugs
Fatigue
Disabilities
Effects of Aging
Health Problems
Vision and Hearing
Smoking
Effects of Carbon Monoxide
Correcting and/or Compensating for Physical Impairments

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ______________, pp. ____________.
2. Independently read the booklets, You.... Alcohol and Driving, and Know Your Limits, A Sound Approach to Safe Driving.
3. In a classroom group setting, participate in the "Puzzle on the Floor" activity.
4. In a classroom group setting, view Aetna Series Filmstrip-Cassette Program, Personal/Social Interactions (FS/C). While viewing, answer and briefly discuss as a group the

questions posed on the filmstrip.

5. In a classroom group setting, view A New Look at the Old Sauce (FS/C).
6. In a classroom group setting, view The Decision Is Yours (FS/C). Participate in discussion on the questions posed in the FS/C program.
7. In a classroom group setting, view the Trigger Films Go, Stop Sign, and Homework and participate in group discussions on each.
8. Independently complete Worksheet W17a. In a classroom group setting, participate in a teacher-led discussion using Worksheet W17a.
9. Independently complete Worksheet W17b.
10. Independently complete Worksheet W17c. In a classroom group setting participate in a teacher-led discussion using Worksheet W17c.
11. Using Worksheet W17e, independently and in a classroom group setting, according to directions, participate in a teacher-led exercise on the booklet, People Do Drink and Drive.
12. Independently complete Worksheet W[illegible].

EVALUATION

1. Complete Evaluation E17.

September, 1979

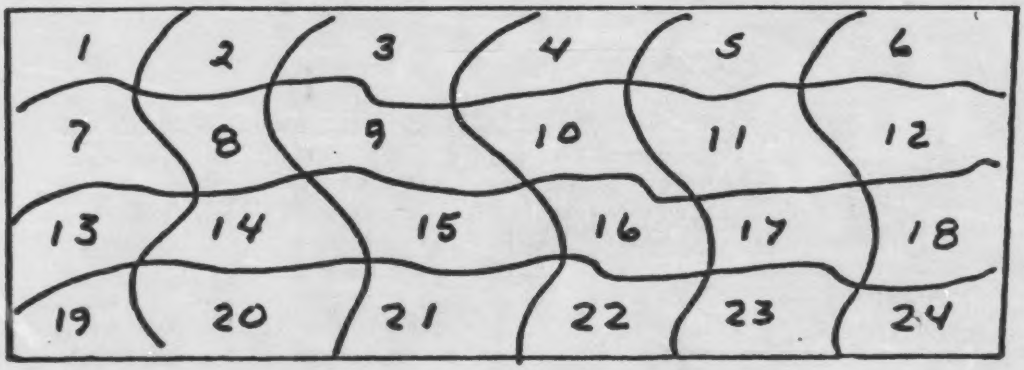
TEACHER-LED EXERCISE, PUZZLE ON THE FLOOR
(Student Learning Activity 3, Module 17)
(Page 1 of 3 pages)

A. Description:

Using butcher paper and crayons, students draw or express on paper their concepts of what their driver's licenses mean to them or how they view their world.

B. Preparation:

1. Prior to the class, obtain two sheets of butcher paper (approximately 30" x 72" for 24 students, 30" x 84" for 28 students, about 1 foot of 30-36" butcher paper for each four students), and enough crayons to allow each student to have two or three.
2. On one sheet of butcher paper draw lines similar to the ones shown below and number the individual pieces. Place the second sheet over the top of the original sheet and trace the same lines. Number each piece on the back. Cut the second sheet (with the numbers on the back) into its individual pieces.



C. Implementation:

1. When the class has assembled, arrange the members in a circle and spread out the large bottom puzzle sheet on the floor in the middle of the circle. Distribute one piece of the puzzle to each member of the group, including the group leader. Make the puzzle size match the number of students who would normally be in the class and leave the pieces blank for the number absent, (if any students are absent) pointing out in your concluding discussion that the puzzle is incomplete without the input of the students who are absent (and so is any true class discussion without everyone's input).
2. Tell the students that they have been given a piece of paper on which they are to draw their concept of what their driver's license means to them. Pass around the crayons and instruct them to select colors they need to communicate their ideas. They may draw a complete picture and/or use symbols, words, diagrams, designs, or colors alone to communicate their ideas. They should color the puzzle piece on the side opposite the numbers so it will properly fit in its space.
3. As the students begin to finish, instruct them to place their pieces on the corresponding numbers on the puzzle. As the group leader, you may have to begin the puzzle, if the group is hesitant to move. It is important for you to take part in the whole exercise.
4. When all are through coloring and have placed their pieces of puzzle on the sheet, randomly select puzzle pieces and ask students to explain to the rest of the group their concept of what their driver's license means to them. Before

you begin, it may be necessary to draw the circle closer together so that everyone can see. It is important to discourage any disparaging remarks in the group, as this will not foster a spirit of open sharing of ideas and feelings which you are trying to establish.

5. As students explain their pictures, it is important that you use paraphrasing to make sure you have really heard what each student has said.

   A typical exchange may go something like this: "John, what is your picture all about?"

   "Well, I drew a truck. My license means I can get a job driving for my dad, so I can earn money".

   "So as you look at your license, it means the chance to earn money?"

   or

   "I drew a roadrunner -- it gives me a chance to go fast and I like speed."

   "Your license gives you a chance to go fast?"

   If you properly reflected John's statement, John will say "yeh" or nod his head in agreement. If you missed the point of the explanation, the student will ordinarily correct you, and you may reflect that response as well and work for the nod of the head or a "yeh." Do not praise, do not criticize, do not cut, do not belittle. The technique will be easier once you have tried it a few times. You are looking for a couple of key words or feelings in each explanation that you will reflect back to the student.
6. You may wish to pause halfway through the explaining process and ask students what they notice about your responses to the various explanations. If you have done some good, non-judgmental reflecting, they will tell you that you were accepting, didn't criticize them, or didn't praise them. You may wish to then explain your technique and ask them if they want to try a hand at it for the rest of the group's explanations. You may also decide to wait with this discussion of the technique until all are done explaining their puzzle pieces. It is effective in either place.
7. Next ask why you have used a puzzle instead of handing each student an 8½" x 11" piece of paper. What is it about a puzzle that might apply to the class? You are looking for such responses as:

   a. Each piece of puzzle is unique.
   b. Each piece has a special place.
   c. Each piece is part of a whole.
   d. If a piece is missing, the puzzle is incomplete.

   What do these have to do with the class?

   a. Each person is unique.
   b. Each person has a special place.
   c. Each person is part of a whole class and sometimes will have the same ideas.
   d. If a person is missing, the class is incomplete without his/her input.
8. Talk about what the students have learned; perhaps they learned something about a person they have gone to school with for twelve years that they didn't know before. You may also want to talk about the importance of reflective listening in class discussions. Sharing and accepting of individual ideas is also important to class progress.

9. Some of the following questions might be used:

   a. What were some of the different ideas expressed on what a driver's license means to you?
   b. Because individuals have different ideas on what a license means to them, does this mean that they are "oddballs?"
   c. When does it bother or irritate you for others to have different ideas, goals, values, etc., from yours?

* *

Below are samples of other topics that could be used rather than the driver's license. (The topic area should be broad enough so the students may show individual differences. Narrowing the area will force students to express very similar thoughts.)

1. What is your view of the world around you or where you are in the world? We all live in the same world, but we live our lives differently. How do you fit in that world -- your own personal world? This will help students see more about their behavior. (Example: Two hands held together, love, family relationships, etc.)
2. What does your car mean to you, or what does your right or privilege to drive mean to you? It is important to make this variation a personal thing rather than putting down responses that the students think the group leader wants. The emphasis needs to be on their actual feelings or thoughts with no right or wrong answers.
3. Other topic areas might be:

   a. What are your goals?
   b. What do you want to be, or what do you want to do?

mber, 1979

TEACHER-LED EXERCISE, TRIGGER FILMS
(Student Learning Activity 7, Module 17)
(Page 1 of 5 pages)

The first 3 pages are explanations and suggestions for use of the Trigger Films. The last 2 pages are general and specific questions to use in initiating and stimulating further discussion for the selected films.

The "Trigger Film" Series consists of two groups of films relating to driving. The Emotional Film Series, of which two are included in this SLA, center around one primary character--a young driver. In each film, he is pictured in a situation in which his emotions or feelings overcome his normal balanced state of mind.

One Situational Film is included in this SLA. The main character in this film is also a young driver. The driver encounters a frustrating experience (near accident and inconvenience) within a very specific driving situation.

UTILIZATION OF FILMS IN THE CLASSROOM

DIFFICULTY OF THE TASK

Effective utilization of the trigger films can be a difficult task for the traffic safety education teacher. The major task of the teacher is to promote student discussion by asking stimulating questions. However, the goal of the film presentation should not be discussion for its own sake. An effective presentation should, hopefully, produce changes in driver behavior. The purpose of this section is to help the teacher present the films in a manner that will produce young drivers with responsible values, attitudes, habits, and capabilities.

Discussion may involve the class as a whole. For this method to be effective, it is necessary that the class be relatively small in student enrollment (25-30) and that the students be actively involved. In most classroom discussions, one can find students who will not participate verbally and also students who will try to dominate the discussion. An effective teacher may avoid these problems by "forcing" the shy students to participate through questioning them and thereby discouraging the more talkative students from "taking over" the discussion.

If the classroom method is used, it is recommended that students arrange themselves in a circle. This seems to be advantageous for student interaction and also gives each student a sense of group belonging. The students will also be able to hear each other better if they can see each other. The teacher's location in the discussion is vital to the effectiveness of the discussion. It seems that if the teacher places himself in the center of the circle, he will then be the center of attention and perhaps inhibit student response. It appears that the teacher should position himself between two of the students who make up the circle. This gives the discussion a more informal setting which is more apt to promote student response.

PRINCIPLES OF DISCUSSION LEADERSHIP

As stated earlier, the trigger films are based on the concept of self-discovery. The traffic safety education teacher's assignment is to assist this process by non-directive discussion. Exhibit A outlines five main features of discussion leadership which will promote the process of self-discovery. (Exhibit A on following page).

EXHIBIT A: PRINCIPLES OF DISCUSSION LEADERSHIP

1. Listening and questioning
2. Responsive interaction
    a. Echo
    b. Initiating and responsive questions
3. Non-evaluation
    a. Non-directive versus directive questions
    b. Neutral but supportive behavior
4. Active involvement
    a. Teacher-student interaction
    b. Student-student interaction
5. Personal feelings and behavior

1. Listening and questioning. The teacher's role is not to give facts or advice. Rather, his task is to get students talking. He will do a lot of listening, and a lot of questioning. Both of these are vital, and the effective teacher will alternate between them.

Of these two functions, listening may be the harder. Some teachers cannot accept silence. At any pause they feel they must come in with another question. They should try to relax. Often an attentive silence will stimulate response. Try this: simply look steadily at a student; in a few moments, he is likely to respond.

2. Responsive interaction. This is an extension of the first principle. The teacher not only asks questions and listens; he engages in active, back-and-forth interaction with the students. One way of doing this is to:

a. Echo or repeat what a student has just said. The echo indicates that the teacher has in fact heard the student, and it will often stimulate him to say more. Sometimes the student mentions an important idea which is lost in a noisy hubbub. By repeating the idea, the teacher can focus everyone's attention to it.

Another way to respond is to ask a question that grows out of something a student has said. It's useful to distinguish between:

b. Initiating and responsive questions. An initiating question is one which opens a topic for inquiry, such as: "What was the young man in the film feeling? How did his feelings affect his driving?" A responsive question, on the other hand, occurs when a student makes a remark and the teacher draws him out. For example, in one discussion of STOP SIGN where the young man blares his horn, the following exchange occurred:

STUDENT: "You hear that horn and you freeze; it shakes you up. Whenever I use a horn, it's for a good purpose."
TEACHER: "What do you define as a good purpose?"

Responsive questions accomplish several things. They demonstrate that the teacher has really listened. They help to bring out additional details--sometimes of a sensitive character.

The following are some general responsive questions which can be asked almost any time:

"Can you tell me more about that?"
"Can you give an example of that?"
"When is that likely to happen--under what conditions?"
"What about the rest of you? Are your experiences similar or different?"

The last is a response to one speaker, but its purpose is to draw out the other students.

3. Non-evaluation. The teacher avoids moral judgment. Since the purpose of the trigger films is to help the students shape their own standards on the basis of their own experience, the teacher does not offer his own views unless asked. Even then he would be careful to call them his own opinions and not necessarily correct.

One implication of this principle is that the teacher asks:

a. Non-directive rather than directive questions. By this we mean that the teacher does not steer the discussion toward some conclusion he has in mind. He is not asking for "right answers." His task is to get students' views on what works best for them under a variety of conditons.

Another implication of non-evaluation is that the teacher's behavior toward the student remains:

b. Neutral but supportive. When students describe their highway behavior or their feelings the teacher remains neutral; he neither approves nor criticizes. But at the same time he is not cold or indifferent. He is warmly interested in what they are saying; he is supportive of them as individuals. This dual role is not easy.

- - - -

Principles 1-3 have mainly described the teacher's behavior, which attempts to create an atmosphere in which self-discovery can occur. Principles 4 and 5 refer to aspects of this atmosphere as exhibited in student behavior. The five principles, hence, are somewhat overlapping.

- - - -

4. Active involvement. For genuine self-discovery to occur, students should participate actively. The trigger films are entertaining, but a student can watch passively and not learn much about himself.

Involvement can be stimulated in several ways. The previous behaviors of the teacher, especially responsive interaction, are likely to arouse:

a. Teacher-to-student interaction. Another sign of active involvement is:

b. Student-to-student interaction. Often this will happen spontaneously, especially when students disagree with each other. To promote such interaction the teacher will sometimes encourage arguments.

5. Personal feelings and behavior. It is easy for students to remain impersonal. They can blame the road, the weather, or other drivers--the people in the films, their parents, Sunday drivers, "little old lady" drivers--and never mention their own driving. But the student is not thoroughly involved unless he talks about himself--his own feelings and behavior behind the wheel.

Often this will happen spontaneously; students switch from talking about what "they" do to what "I" do or feel in a situation like that. If this doesn't happen naturally, the teacher can help by asking a direct question: "Have any of you ever done anything like that? Tell us about it."

GENERAL DISCUSSION QUESTIONS

Even with the directions above and the questions that follow, there may be difficulties at times. It is suggested that you read the section entitled "What Do I Do If?" in the Guidelines for TSE Teachers in the Use of "Trigger Films," State of Washington, 1973, pp. 24-26.

The previous section drew a distinction between "initiating" and "responsive" questions. After lively discussion gets underway the teacher will find that most of his questions can be responsive ones. But sometimes discussion is slow to start. The teacher will usually ask initiating questions to get things going.

Many of these questions will be general ones that can be asked again and again, in slightly different ways. Exhibit B lists eight of them. Questions 1-4 apply mainly to the emotional series of trigger films; questions 5-8 apply mainly to the situational films.

EXHIBIT B: GENERAL DISCUSSION QUESTIONS

1. What are your feelings in a situation like this?
2. How does your state of mind affect your driving?
3. How can you compensate by driving differently?
4. How can you prevent this situation from arising?

- - - -

5. What caused this situation or close call?
6. What alternatives or options would you have?
7. How do you decide among these alternatives?
8. How could you prevent this incident from arising?

(A detailed explanation of these questions and some alternatives in asking them can be found in the Guidelines for TSE Teachers in the Use of "Trigger Films," State of Washington, 1973, pp. 8-11.)

SPECIFIC QUESTIONS

The following are initiating or stimulating questions for the specific films:

GO!

Content

Two young drivers are stopped side by side at a stop light. One driver races his motor to challenge the other to drag race. After some thought, the challenge is met and the dialogue between motors reaches a climax as the light turns green. They are off.

Suggested Questions

1. Are people who drag usually older or younger? Why do they drag?
2. Do you think the boy in the first car would accept a challenge to a drag race every time he is challenged? Why or why not?
3. The boy seemed to be hesitating before he accepted the challenge. What was he thinking of?
4. Are there some things you take into consideration before accepting or rejecting a challenge? What things influence your decision?
5. What about girls--do you think they race? Against girls or boys? What would you girls say to your date if he wanted to drag with you in the car?
6. What are the penalties if you get caught drag racing? Would you think of this before accepting or rejecting a challenge?

7. Let's assume you are a policeman and you have just witnessed a drag race. What would you do? Why?

- - - -

HOMEWORK

Content

High school aged boy is outside of his home polishing a car. His father rushes from the house and screams at him about his homework. The boy builds up inner anger and finally jumps in the car, peels out of the driveway, and speeds down the street. His father is left screaming, "Where do you think you're going?"

Suggested Questions

1. Where was the boy going when he drove off? What was he going to do? Would he drive as he normally does?
2. Over what period of time do you think he will drive this way?
3. After an argument, how is driving affected? Does it affect all drivers the same?
4. Are there other ways of "cooling off" besides driving?
5. If you were driving while angry, do you think you could do anything to minimize the risks? What?
6. If the same situation involved a girl and her mother, would her reaction be the same as the boy's or different? Why?
7. Are there any other situations which might cause a similar reaction? Would they affect driving the same or differently?

September, 1979

WORKSHEET W17a
(Page 1 of 2 pages)

ATTITUDES ASSESSMENT CHART

Name________________________________

You will rate five persons, using the scale found at the bottom of this page. You select the persons you wish to rate. They can be friends, adult or student, etc. If you wish, you can make one of them yourself. You should know who each person is but probably would not identify them to anyone else.

Read, very carefully, the list of attitudes. Then, rate each person as to his attitudes. Place a number from the rating scale (rating scale found at the bottom of this sheet) to the right of each attitude, under each person's lettered column.

Then complete N, P, and Q in the last three rows. Only after completing the entire front of this chart, turn to the back and transfer the scores from rows N and P to the spaces provided. For best results, do not look at the back until you have completely finished the front.

ATTITUDES	Person A	Person B	Person C	Person D	Person E
1. TAKES CHANCES					
2. OBEYS LAWS					
3. UPSET EASILY					
4. CONSIDERATE OF OTHERS					
5. DISREGARD FOR OTHERS					
6. ALWAYS DEPENDABLE					
7. MAKES POOR DECISIONS					
8. RECOGNIZES DANGEROUS SITUATIONS					
9. DISREGARD FOR EQUIPMENT					
10. MAKES GOOD DECISIONS					
11. BLAMES OTHERS					
12. TAKES CARE OF EQUIPMENT					
13. SHOW OFF					
14. VERY IMPATIENT					
N. Add your ratings for each person for #'s 1, 3, 5, 7, 9, 11, 13, 14.					
P. Add your ratings for each person for #'s 2, 4, 6, 8, 10, 12.					
Q. WOULD YOU RIDE WITH THIS PERSON? ANSWER: YES OR NO					

RATING SCALE: 5 - All the time 3 - Occasionally 4 - Most of the time
2 - Very seldom 1 - Not at all

September, 1979

WORKSHEET W17a
(Page 2 of 2 pages)

ATTITUDE ASSESSMENT CHART
(for use by student after drivers are evaluated)

RATING OF PROBABLE DRIVING PERFORMANCE

Negative Attitude Points (N) (8 statements)		Positive Attitude Points (P) (6 statements)
32 and above -	should not be on road	- 6 to 12
24 to 32 -	needs definite changing (very dangerous driver)	- 12 to 18
16 to 24 -	needs improvement (average)	- 18 to 24
8 to 16 -	very good attitude	- 24 and above

Score Driver A	
______ N (Negative)	______ P (Positive)
Score Driver B	
______ N (Negative)	______ P (Positive)
Score Driver C	
______ N (Negative)	______ P (Positive)
Score Driver D	
______ N (Negative)	______ P (Positive)
Score Driver E	
______ N (Negative)	______ P (Positive)

Compare the scores of the persons you rated to the above rating of probable driving performance and then check again your answer for Q on the front.

September, 1979

TEACHER-LED DISCUSSION
to be used with
WORKSHEET W17a
(One page only)

The following are suggested questions to ask during the teacher-led discussion using W17a which each of the students should have previously completed.

1. How did the people you rated come out.

2. Had you given thought before to not riding with someone whom you think has a "bad" attitude?

3. Did you change your mind, or at least have second thoughts about riding with some of the people you rated after comparing their scores to the rating of probable performance?

4. Do you think there is a relationship between the attitudes used for rating and probable driving performance as the worksheet implies. Why or why not?

5. Do you think you might try to make some changes in yourself as a result of doing this exercise. Why or why not?

September, 1979

WORKSHEET W17b
(Page 1 of 2 pages)

DRIVER ATTITUDE CHECK LIST

Name________________________________

Read each question carefully and check the box which best describes your attitudes. Answer honestly. It will help you learn about yourself and what kind of driver you may become. In some instances you may have to consider the question as will you do it rather than do you do it.

DO YOU:	Frequently	Occasionally	Rarely	Never
1. Clean your windshield when it is dirty?	☐	☐	☐	☐
2. Signal when pulling away from a curb?	☐	☐	☐	☐
3. Wonder how other drivers got their license?	☐	☐	☐	☐
4. Accelerate gradually when pulling away from a green light?	☐	☐	☐	☐
5. Remain calm in most traffic situations?	☐	☐	☐	☐
6. Allow a space for new traffic entering your lane?	☐	☐	☐	☐
7. Park legally at all times?	☐	☐	☐	☐
8. Periodically inspect your vehicle?	☐	☐	☐	☐
9. Feel satisfied when you see a traffic officer performing one of his jobs - ticketing violators?	☐	☐	☐	☐
10. Abstain from drinking when driving?	☐	☐	☐	☐
11. Allow pedestrians to cross the street?	☐	☐	☐	☐
12. Come to a "complete stop" at all traffic signs and signals when required to do so?	☐	☐	☐	☐
13. Remain calm when other drivers honk at you?	☐	☐	☐	☐
14. Give adequate warning before backing?	☐	☐	☐	☐
15. Put on chains when the conditions require it?	☐	☐	☐	☐
16. Dim your headlights when meeting oncoming traffic?	☐	☐	☐	☐
17. Remain on low beam even though the other driver does not dim his lights?	☐	☐	☐	☐
18. On rural roads, with adequate shoulders, pull off the road entirely to park?	☐	☐	☐	☐
19. Treat slow pedestrians or drivers with consideration since they may have a physical handicap?	☐	☐	☐	☐
20. Control your emotions when confronted with annoying situations?	☐	☐	☐	☐
21. Stop when traffic light turns amber and you are close enough to almost get through before it turns red?	☐	☐	☐	☐
22. Use turn signals even when other drivers are not around?	☐	☐	☐	☐
23. Anticipate the actions of others?	☐	☐	☐	☐

September, 1979

WORKSHEET W17b
(Page 2 of 2 pages)

	Frequently	Occasionally	Rarely	Never
24. Feel that you are a good driver and pedestrian?	( )	( )	( )	( )
25. Think the other drivers consider you a better than average driver?	( )	( )	( )	( )
Total the number of check marks in each column. Multiply the # of checks in each column by the following:	___ x4	___ x3	___ x2	___ x1
	___	___	___	___
Add the totals from all the columns:	________			

Once you have this total score, use the table below to interpret your score. To get full benefit from this exercise, it is better not to look at the table before completing the above.

* *

80 - 100	Almost honor roll. (Are you telling the truth?)
65 - 79	Just getting by - average.
40 - 64	Watch your step - your attitude needs improvement.
25 - 39	Your attitude is poor.

September, 1979

WORKSHEET W17c
(One page only)

Name ______________________________

Directions: Put a check after each drug in this list in the column which most accurately describes the effects of that drug on driving competence.

	EFFECT			
	GOOD	NONE	SOME BAD	LARGE BAD
Caffeine (coffee, tea, coke)				
Nicotine (cigarettes)				
Diet Pills				
Cough Medicine				
Aspirin				
Cold Tablets				
Alka-Seltzer				
Sleeping Pills				
Pain Pills				
Vitamins				
Allergy Pills				
Benzedrine (strong stimulant)				
Marijuana				
No-Doz Tablets				
Tranquilizers				
Antacids (Di-Gel)				
Heroin (narcotics)				
Mouthwash (Scope)				

List four of the factors which will vary the amount of effect of drugs on the human body and therefore on driving competence.

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________

This worksheet when completed, will be used in a teacher-led class discussion.

October, 1979

WORKSHEET W17e

(Page 1 of 8 pages)

Supplement to the Booklet "People Do Drink & Drive"

Directions to the teacher:

1. In class, hand out Page 2 & 3 only of this worksheet to the students and have them complete it.
2. Once they have completed it, discuss their answers, using the section entitled "What Might Your Responses Mean?" on pp. 7 & 8 in the booklet "People Do Drink and Drive."
3. Check out the booklets to the students and give them the remainder of the worksheets (pp. 4-8).
4. Assign reading "People Do Drink and Drive," and completion of the worksheet.
5. Part 1. Conduct a teacher-led discussion using the following questions:
    - a. Since eating before and while drinking slows down the effect of alcohol on the body, what would you suggest for the person who plans to drink or serve alcohol?
    - b. How would you respond to the people who suggest cold showers, coffee, or exercise as a means of getting rid of the effects of alcohol?
    - c. What are our state's laws regarding drinking and driving, and what is the BAC level for determining intoxication?
    - d. What is the only way to prevent ever reaching a BAC above .00?
    - e. How many drinks could YOU consume in one hour and keep your BAC below .05? .10?
    - f. What factors in addition to the amount of alcohol should a person consider in determining "how much is too much?"
    - g. Where could you get help for anyone (including yourself) if he/she/you have an alcohol problem?
    - h. How would you summarize your position regarding the issue, "Minding Your Own Business" vs "Helping Those in Need"?

    Part 2. Discuss the answers the students gave in each of the Situations II through IX. (This may be done on a separate day from Part 1 if the discussion is taking too long.)

October, 1979

WORKSHEET W17e
(Page 2 of 8 pages)

What would you do in these situations?

(Place an "X" in the space to indicate which option you select in each situation).

You see a man who has had too much to drink getting into his car to drive off.

1. ____ If the man were having trouble opening the car door, you would help him.
2. ____ You would smile or laugh as he staggers, but you would keep walking.
3. ____ You would shake your head in disgust but mind your own business.
4. ____ You would approach the man and try to persuade him not to drive.
5. ____ Other (explain).

Your friend, who doesn't want to drink because he'll be driving, is being pressured by others to have a drink.

1. ____ You would also suggest to your friend he ought to have at least one drink to be sociable.
2. ____ You would join the laughter but say nothing.
3. ____ You would walk away from the group.
4. ____ You would tell the others to lay off.
5. ____ Other (explain).

You are invited to a party where your friends will be drinking, but, since you'll be driving, you don't want to drink.

1. ____ You accept the beer your friend gives you and drink it.
2. ____ You accept the beer and only pretend to drink it.
3. ____ You accept the beer but neither drink it nor pretend to.
4. ____ You refuse the beer and suggest a coke.
5. ____ Other (explain).

You have been drinking a lot and you have the family car.

1. ____ You would offer to drive your friends home.
2. ____ You would drive only yourself home.
3. ____ You would accept another's offer to drive you home.
4. ____ You would ask someone else to drive you home.
5. ____ Other (explain).

You are with your parents, who have been drinking heavily, and now it's time to drive home.

1. ____ You would suggest that they drink up and drive you home.
2. ____ You would laugh with them and start putting your coat on.
3. ____ You would show disgust but say nothing.
4. ____ You would suggest that neither your mom nor your dad drive.
5. ____ Other (explain).

October, 1979

WORKSHEET W17e
(Page 3 of 8 pages)

Your friend, who has driven you to a party, is about to have one last drink "for the road."

1. ____ You pour yourself "one for the road" and drink with him.
2. ____ You wait until he finishes his drink, but you say nothing.
3. ____ You would prefer that he not drink, but you say nothing.
4. ____ You would ask him not to have the drink.
5. ____ Other (explain).

October, 1979

WORKSHEET W17e
(Page 4 of 8 pages)

1. What would be the approximate BAC for an average weight person who has had two drinks in one hour?

   ______________percent BAC

2. What would be the approximate BAC for a person who has had two drinks in two hours?

   ______________percent BAC

3. If a person wanted to maintain a BAC close to .00-and thus, avoid the impairment effects of alcohol-about how many drinks could he safely consume in a three-hour period?

   _______drinks (number of)

There is more to determining the effects of alcohol (impairment) on a person than just determining the amount of alcohol he has consumed. Consider the following and determine which person might be more impaired after drinking:

4. (a) The person who drinks nearly every day, and who has just had three beers, or (b) the young beginning drinker who has had only one or two beers in his lifetime, who has just had three beers. (Circle one, "a" or "b").
   What reasons can you give to support your response?

5. (a) The girl who has had plenty of rest and has just had two cocktails, or (b) the young girl who has only had six hours of sleep in two days, followed by two cocktails. (Circle one, "a" or "b").
   What reasons can you give to support your response?

6. (a) The guy who is depressed after having just lost his girlfriend and who drinks four beers, or (b) his friend who feels great, and then drinks four beers. (Circle one, "a" or "b").
   What reasons can you give to support your response?

7. (a) The girl who has just taken two cold pills and then drinks one beer, or (b) the girl who feels great and has one beer. (Circle one, "a" or "b").
   What reasons can you give to support your response?

8. (a) The person who wants to get "high" or (b) the person who doesn't want to get "high" after drinking the same amount of alcoholic beverage. (Circle one, "a" or "b").
   What reasons can you give to support your response?

9. (a) The person who is excited and happy or (b) the person who just feels normal after drinking the same amount of alcohol. (Circle one, "a" or "b").
   What reasons can you give to support your response?

October, 1979

WORKSHEET W17e
(Page 5 of 8 pages)

SITUATION I
Minding Your Own Business vs. Helping Those In Need

Some say that people are basically selfish, that if you don't watch out for yourself, no one else will. The key to success, they say, is to "mind your own business."

Others say that people need to stick together and help one another, that should "help those in need."

Write out what you would do in each of the following situations?

* You are at a party where someone is very drunk and sick.

* You are with some friends. One of them has had too much to drink to drive safely, but he is planning to drive home anyway.

* You are with a group of persons with whom you would like to be friends. Two of the boys try to persuade another to take some liquor from his parents' cabinet supply.

* One of your friends seems to be drinking more and more. Every time you see him he has had something to drink.

* Some of your friends suggest "spiking" the cokes of the non-drinkers at a party.

SITUATION II
Peer Pressure

Tom is at a party where some of his friends are drinking alcoholic beverages. He doesn't care to so he opens a coke. They coax him to have just one drink. He refuses, saying, "I just don't want to drink. I don't have anything against it--I just don't want to."

The other fellows continue to nag him about drinking. Finally, in desperation, Tom says, "Okay, just one."

* What do you think of what Tom did?

* What is your opinion of Tom's Friends?

* If you were Tom, what would you have done?

* If you were one of Tom's friends, would you have acted differently?

SITUATION III
Being Different

Ollie and three friends are shooting baskets at the playground when a number of their friends drive up and ask if they're interested in a party where there will be plenty

WORKSHEET W17e
(Page 6 of 8 pages)

(SITUATION III continued)

of beer and some cute girls.

Ollie says, "Thanks, no!"

encourage Ollie to come along, Ollie says, "You go if you want to, but I'm not going."

* What do you think of Ollie?

* Why do you suppose he didn't want to go?

* What effect might Ollie's decision have had on the others he was playing basketball with?

SITUATION IV
What Would Your Parents Say?

Ron has just arrived at Sue's house to pick her up for a beer party they plan to attend. Sue greets Ron at the door and says in a quiet voice, "What will you say when my parents ask you where we're going?"

"Well, if I tell them the truth," Ron replies, "they probably won't let you go. If I lie and they find out, we're really in trouble."

Sue suggests, "We could tell them we're going to a party, but not say anything about the beer."

* What difference will it make what they tell Sue's parents?

* What would you say if you were Ron? If you were Sue?

* How would your parents react to your answers? (Predict their reactions; then ask them.)

SITUATION V
He's Had Too Much

Greg and Sheila have been at a party since eight o'clock. He has consumed several beers but Sheila hasn't drunk at all. It is now midnight and time for Sheila to go home.

Since Greg has had close to ten beers and is feeling pretty "high," Sheila suggests that she drive home. Another boy comments to Greg that this might be a good idea. Greg replies, "I've had more than this lots of times, and I've always made it home. I'm okay for driving."

* What is your opinion of Greg?

* If you were Sheila, what would you do?

* If you were the other boy, what would you do?

SITUATION VI
Do Others Really Think What You Think They Think?

Jeff, the driver, and three friends are parked in the country, where one of the friends has stashed a case of beer.

Jeff figures he probably shouldn't drink, since he is driving, but he is afraid his friends will cut him down if he doesn't drink with them. So he asks for a beer.

Meanwhile, at least one of Jeff's friends is concerned that Jeff is drinking, but he, too, is afraid to say anything about it.

* How could this type of situation be prevented?

* Do people always mean what they say?

* What are your reactions to this situation?

SITUATION VII
Deciding for Others

Sally, who sometimes drinks, has decided not to drink tonight. Her date for the party, Gene, is disappointed in her decision, and asks if anything is wrong. Sally responds, "Nothing. I just don't feel much like drinking tonight."

Gene gets Sally a soft drink. They do some dancing and he offers to get her another. While he is pouring her drink this time, he adds some vodka, and tells others that Sally will never know the difference.

* What is your opinion of Gene's actions?

* If you were one of the others, what, if anything, would you do?

* If you were Sally and you found out about the vodka how would you probably react?

SITUATION VIII
Influencing Others

You and your younger brother have accompanied your parents to visit some friends. During the three or four hours you have been visiting, your parents have been drinking steadily.

It is nearing time for your family to leave. You and your brother have the following conversation:

YOU: Man, have they had a lot to drink! This place looks like a liquor store with all these bottles all over the place.
Brother: From the way they sound, you know they've had a lot!
YOU: I think I should drive home.
Brother: They'll never let you.
YOU: I know I'm not a very experienced driver, but I sure would feel safer with me driving than with either of them behind the wheel.
Brother: They're not exactly falling down drunk, you know.

October, 1979

WORKSHEET W17e
(Page 8 of 8 pages)

(SITUATION VIII continued)

YOU: True. But alcohol affects your ability to drive even before you get bombed.
Brother: Okay. But you'd better come up with some pretty good arguments. Got any suggestions?

Write your response to your brother's final question.

SITUATION IX
A Friend

It is past midnight when you get a phone call from a friend. She says she is drunk and needs a ride home. It is obvious from the way she sounds that she has had too much to drink.

Several thoughts run through your mind. Should you tell your parents? Isn't there someone there who could take her home? Is she really that bad off?

* What would you do?

* What do you think of the girl who called?

* How might the friend react if you refused?

* How would you describe the meaning of "friend"?

* How would your parents react to your friend's request? (Write your answer then ask them.)

September, 1979

WORKSHEET W17d
(Page 1 of 2 pages)

Name ______________________________

1. Define the following terms:
    a. Night vision: ______________________________
    b. Field of vision: ______________________________
    c. Visual acuity: ______________________________
    d. Depth perception: ______________________________
    e. Color vision: ______________________________

2. How could deficiencies in the above visual abilities effect driving performance?

____

3. How do the following diseases or conditions effect driving performance and how would you compensate for each?
    a. Heart disease: ______________________________
    b. Diabetes: ______________________________
    c. Old age: ______________________________
    d. Epilepsy: ______________________________
    e. Physical handicaps: ______________________________

4. What can a driver do to avoid driving problems if drowsy at the wheel (list three or four alternatives)? ______________________________

September, 1979

WORKSHEET W17d
(Page 2 of 2 pages)

5. What can a driver do to compensate for or minimize problems for each of the following?

a. Poor depth perception: ______________________________

____

b. Defects in color vision: ______________________________

____

c. Problems in night vision: ______________________________

____

October, 1979

EVALUATION E17a
(Page 1 of 4 pages)

Directions: Write the letters of the correct answers on the separate answer sheet. A total of 20 points is needed to pass.

(Each question is worth one point)

1. A physically-handicapped person can drive as well as one who is not handicapped by:
   - a). Passenger assistance.
   - b). Compensating for the disability.
   - c). Ignoring the disability.
   - d). Self-confidence.
2. Which of the following violations is most likely to be committed by an elderly driver?
   - a). Improper turning.
   - b). Speeding.
   - c). Drinking and driving.
   - d). Driving a vehicle in unsafe conditions.
3. A maximum driving age would not be appropriate because:
   - a). It could not be enforced.
   - b). Of the expense involved.
   - c). Young people would object.
   - d). Age is not an accurate measure of driving ability.
4. The most serious consequence that can result from carbon monoxide poisoning is:
   - a). Dizziness.
   - b). A traffic collision.
   - c). Death.
   - d). Loss of muscular control.
5. Which of the following measures can help if you must drive when you are tired or drowsy?
   - a). Stop and eat a heavy meal.
   - b). Stop the car, get out, and walk around.
   - c). Keep the windows closed.
   - d). Avoid using the car radio.
6. To avoid carbon monoxide poisoning while driving
   - a). Keep the car windows closed.
   - b). Turn off the engine if the car is parked in an enclosed area.
   - c). Have the car's exhaust system checked periodically.
   - d). Both b and c.
7. The physical, mental, and emotional fitness of drivers and pedestrians with whom you will interact is:
   - a). Excellent.
   - b). Assured.
   - c). Legal.
   - d). Unknown.
8. Which of the following traits is likely to be weakest among young drivers?
   - a). Vision.
   - b). Judgment.
   - c). Reaction time.
   - d). Strength

9. Our driving behavior tends to reflect (show) what kind of a person we:

   a). Want to be.
   b). Are.
   c). Respect.
   d). Expect to be.

10. Which of the following attitudes will help you to be a safe and efficient driver?

    a). Impatience.
    b). Competitiveness.
    c). Fear.
    d). Attentiveness.

11. With which of the following passengers are young drivers most likely to drive safely?

    a). Girl or boy friend.
    b). Other friends.
    c). Brother or sister.
    d). Parent.

12. Our emotions, particularly while operating a motor vehicle should be:

    a). Controlled.
    b). Eliminated.
    c). Exhibited.
    d). Condemned.

13. An individual's driving behavior:

    a). Varies somewhat depending on conditions.
    b). Depends mostly on knowledge of traffic laws.
    c). Improves automatically with experience.
    d). Remains constant.

14. How we view persons or situations is influenced most by:

    a). Knowledge and skill.
    b). Age and physical health.
    c). Sex and appearance.
    d). Attitudes and emotions.

15. When operating a motor vehicle our attitudes tend to be:

    a). Changed.
    b). Expressed.
    c). Concealed.
    d). Inactive.

16. Three people of the same age, weighing different weights, have just finished 3 cocktails each. The person most affected will be the one weighing:

    a). 150 pounds.
    b). 175 pounds.
    c). 200 pounds.
    d). All affected the same.

October, 1979

EVALUATION E17a
(Page 3 of 4 pages)

17. Which of these is the wisest strategy to use when a driver is consuming alcoholic beverages?

    a). Drink black coffee before driving.
    b). Space drinks about 1 hour apart.
    c). Avoid mixing different kinds of liquor.
    d). Avoid carbonated mixes such as pop.

18. When the alcohol content of a typical serving of beer, wine and a mixed drink are compared, it will usually be found that:

    a). There is far less alcohol in the beer.
    b). There is much less alcohol in the wine.
    c). There is much more alcohol in the mixed drink.
    d). The total alcohol in each is about equal.

19. The most reliable way of ridding the body of the effects of alcohol for driving is to:

    a). Drink black coffee.
    b). Drink tomato juice.
    c). Wait one hour for each drink consumed.
    d). Take a walk in cool, fresh air.

20. Alcoholics are a menace when they drive while intoxicated. What is true of social drinkers who drink and drive?

    a). They are harmless because they drink for a different reason.
    b). They can be dangerous when they are impaired.
    c). They are acceptable risks because their basic attitude is good.
    d). They are not a threat because their total numbers are not great.

21. Drinking drivers are involved in about __________ of all fatal crashes in the country.

    a). 1/4
    b). 1/3
    c). 1/2
    d). 3/4

22. Chemical tests for drunken drivers can only be given when the offender gives consent to be tested. Which of the following most accurately describes the Washington Implied Consent Law?

    a). All drivers give consent when they sign their license.
    b). Drivers can avoid arrest by refusing to give consent.
    c). Drivers must give consent after they are arrested.
    d). A test will be invalid without consent.

23. Which of the following driver inputs is affected most after two or three drinks?

    a). Turning corners.
    b). Ability to use the brakes.
    c). Getting the car started.
    d). Decision making.

October, 1979

EVALUATION E17a
(Page 4 of 4 pages)

24. If a person eats before or while he is drinking, the effects of the alcohol will be:

a). Greater.
b). Slowed down.
c). Not affected.
d). Unknown.

25. If a police officer asked a driver to take a breath test because he suspected the person was driving while intoxicated, and he or she refused, in Washington it would probably result in:

a). Nothing.
b). A warning.
c). Suspension of license.
d). A reckless driving charge.

July, 1979

MODULE 18: VEHICLE MAINTENANCE

OBJECTIVE

WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS ON MAINTAINING A VEHICLE IN A SAFE DRIVING CONDITION AND RECOGNIZING NEED FOR MAINTENANCE, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

THE STUDENT WILL DEMONSTRATE MAINTENANCE CHECKS WHICH SHOULD BE PERFORMED AT SHORT INTERVALS AND CORRECTLY DIAGNOSE ANY DEFICIENCIES WHEN THEY EXIST AND CORRECTLY PRESCRIBE ACTION NEEDED.

CONCEPTS

Routine servicing
Vehicle systems, functions and maintenance needs
Maintenance schedule
Effect of operating conditions on maintenance schedule
Value of the car owner's manual
Consequences of improper maintenance
Signs and symptoms of trouble
Guidelines for choosing an auto service agency
Underhood checks

STUDENT LEARNING ACTIVITIES

1. Independently read textbook __________________, pp. _________.
2. In a classroom group setting, view the "Car Care Series for Safety, (7 FS/C programs).
3. Independently read the owner's manual for the family car and write a one to two-page summary of the vehicle maintenance and service instructions given.
4. In small groups of 10-12, participate in a teacher-led discussion and demonstration on routine maintenance checks on the TSE vehicle.
5. Independently complete Worksheets W18a and b.
6. In a classroom group setting, participate in a teacher-led discussion on maintenance and identifying possible maintenance problems.

EVALUATION

1. Complete Evaluation E18.
2. At least once during any driving lesson, perform the following maintenance checks correctly without cue from the teacher or others correctly diagnose any deficiency when it exists, and correctly prescribe action needed when a deficiency exists. On some cars, some parts do not exist. The evaluation then would be that the student could determine that to be so.
    a. Check engine coolant level.
    b. Check engine oil level.
    c. Check automatic transmission fluid level.
    d. Check battery.
    e. Check tires.
    f. Check drive belt(s).
    g. Check power steering fluid.

TEACHER-LED DISCUSSION

(Student Learning Activity 4, Module 18 - Student Learning Activity 6)

SLA 4.

1. Show students where the oil dip stick is located. Demonstrate how to check oil. Show on dip stick how to determine full, when to add a quart of oil. Inform them that dip sticks are located at various places around the engines of various cars, and that to find it they should look for the curved end of the dip stick and see that the casing it goes through goes down into the engine.

2. Show students how to check the coolant level in the auxiliary tank. Inform the students that many older cars do not have auxiliary tanks and that the coolant level has to be checked by removing the radiator cap (show them the location of the cap) and that the level should be about 1½" to 2" from the top. Caution them not to open the cap when the car is hot.

3. Show students how to check the level of the fluid in the battery. Note to them that technically only distilled water or acid should be added when the fluid is low, but that in practice most add tap water. Inform them that directions for how high tu fill the battery is usually written on the battery (usually to the split ring about 1" from the top.) Inform them that many batteries now are permanently sealed and the fluid level check is not necessary.

   Also show the students where to check for corrosion.

4. Show students how to check the automatic transmission fluid level. Show them where to find the directions in the owner's manual on procedures to check the automatic transmission for that particular car. Inform them that the procedures vary from car to car and they should check a manual before checking the automatic transmission. Inform them that the dip stick is almost always located on the right side of the car under the hood near the firewall.

5. Show them how to check the fluid level for the power steering. Inform them that the power steering unit is usually located at the left front of the engine. Inform them that not all cars have power steering.

6. Demonstrate how to check drive belts (fan, power steering belts, etc.). Inform them that as a rule of thumb they should be able to depress the belt about 1/2" when applying pressure between the pulleys. Show them how to twist the belts to check for cracks.

7. Show the students how to check the tire pressure. Also show them how to look for uneven wear. Remind them to check the air pressure in the spare also when they check tire pressure.

SLA 6

Use Worksheets W18a and b for discussion.

July, 1970

WORKSHEET W18a
(Page 1 of 3 pages)

1. In each of the following circumstances, what can you do to keep a car's engine in good condition?

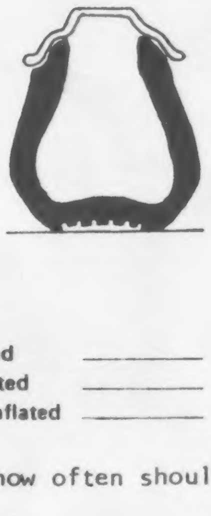
Situation	Your action to keep engine in good condition
When the engine is first started	
When picking up speed	
When the engine begins to sputter in driving through heavy rain	
When the engine is hard to start and performs poorly	

2. Make a list of services that should be given a car every time you guy gasoline. Give the reason for each one.

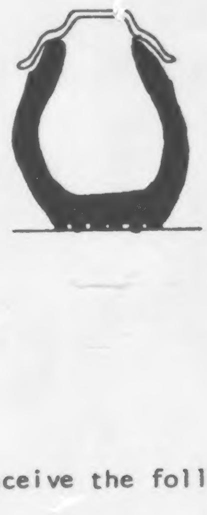
Service	Why necessary
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	

3. Write in the blank that follows each description, the number of the tire below that is described.

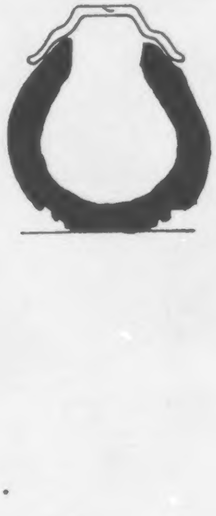
1



2



3



over-inflated ______
under-inflated ______
correctly inflated ______

4. About how often should headlights receive the following services.

1. Cleaned: ______
2. Headlight aim: ______

July, 1979

WORKSHEET W18a
(Page 2 of 3 pages)

5. To Keep your tires in safe condition, what three maintenance precautions should you take regularly? When?

1. ______________________________
2. ______________________________
3. ______________________________

6. Although servicing is usually figured on the basis of the number of miles driven, or at regular calendar intervals, the items below need to be taken care of at stated times or seasons. Fill in the chart to show when the items listed should be serviced and why they should be serviced as often as you have said.

Servicing	**When**	**Why**
Check battery water level		
Check air in tires		
Flush radiator		
Check for leaks in cooling system		
Put in antifreeze		
Put on snow tires		

7. Why does the temperature indicator show *hot* if the radiator freezes? ______________________________

8. After each car part listed, write two or more ways to ensure keeping that part in good working order.

Part	**Maintenance**
Electrical system	
Steering wheel	
Brakes	
Tires	
Oil system	

July, 1979

WORKSHEET W18a
(Page 3 of 3 pages)

9. In preparation for cold weather, what checking or servicing should be done for each item of equipment?

Equipment	Checking or servicing necessary
Muffler	
Tires	
Defroster	
Heater	
Scraping tool	
Battery	
Generator	
Spark plugs	

10. Car maintenance is important because:

	Yes	No
1. Car will last longer.		
2. Car will run better.		
3. Car will be safer.		
4. Car will have higher trade-in value.		
5. Car will require more gasoline.		
6. Breakdowns are less likely.		

11. Which of the following rules are good rules in car servicing?

	Yes	No
1. Make repairs promptly.		
2. Follow only a regular schedule.		
3. Prepare early for winter and summer.		
4. Follow directions in owner's manual.		

July, 1979

WORKSHEET W18b
(One Page Only)

Many mechanical failures can be avoided if a driver notices the first sign of trouble and has the car checked at once. To show what you identify, predict, and decide, fill in the chart.

Situation	You IDENTIFY	You PREDICT	You DECIDE and ACT
Example: 1. You brake; the car pulls to the left.	Brake trouble	Brake will lock left front wheel	Have brakes serviced
2. The engine runs well, but the temperature gauge registers 200^0.			
3. Engine runs well but the temperature gauge shows 200^0 and generator light stays on.			
4. At 40 mph, engine runs well; at 55, it misses intermittently.			
5. The oil light flickers on several times, then stays off.			
6. The back end weaves.			
7. The brakes feel mushy.			
8. Turn signal light on instrument panel flashes and clicks unevenly.			
9. Transmission changes jerkily and late from LOW to DRIVE.			
10. At each acceleration, engine coughs and hesitates.			
11. Starter turns engine briskly at first; then sluggishly.			
12. At 50 mph the car runs smoothly; at 55 mph the steering wheel vibrates -			

July, 1979

EVALUATION E18a
(Page 1 of 2 pages)

Directions: Write the letters of the correct answers on the separate answer sheet. A total of 8 points is needed to pass.

(All questions are worth 1 point each)

1. Why is preventive maintenance important?

   a). To stop trouble as soon as it starts.
   b). To stop trouble before it starts.
   c). To fix worn out parts.
   d). To give every car one good checkup a year.

2. Which of the following should be checked each time the car is gassed?

   a). Engine oil level.
   b). Automatic transmission fluid level.
   c). Power steering fluid level.
   d). Battery fluid level.

3. What is the main purpose of the cooling system in an automobile?

   a). To cool the engine.
   b). To operate the air conditioner.
   c). To cool the passenger compartment.
   d). To operate the thermostat.

4. The main purpose of a car's battery is to:

   a). Supply electric power for the headlights.
   b). Store excess engine power.
   c). Provide power for starting the engine.
   d). Supply power for the air conditioner.

5. If your car tends to "drift" from a straight path, the first thing to check is:

   a). The transmission.
   b). The engine.
   c). The braking system.
   d). The suspension and steering systems.

6. When the steering wheel vibrates at highway speeds, the problem is usually:

   a). Wheel alignment.
   b). Wheel balance.
   c). The engine is missing.
   d). The brakes are dragging.

7. Tire pressure should be checked:

   a). Before the car is driven and the tires are cool.
   b). When on a trip and you have traveled about 50 miles or so.
   c). More often in the summer and fall than in the winter and spring.
   d). Every time the car is gassed.

8. An auto mechanic rather than a vehicle's owner would generally check the:

   a). Tire pressure.
   b). Condition of the brake lining.
   c). Oil, radiator, and battery fluid levels.
   d). All of the above.

EVALUATION E18a
(Page 2 of 2 pages)

9. Engine oil should be changed more frequently:

   a). In warm weather.
   b). In cold weather.
   c). When the vehicle is being used for long-trip driving.
   d). In standard size cars than in compact cars.

10. Which of the following is a sign that the battery may need recharging or replacing?

   a). Loss of power assist to the brakes.
   b). Engine hard to start.
   c). The starter is barely able to turn the engine over.
   d). The car steers hard at slow speeds.

October, 1979

MODULE 19: PLANNING FOR TRAVEL

OBJECTIVE

GIVEN A PROPOSED TRIP FROM ____________________ (LOCAL TOWN OR CITY) TO ____________________, (A CITY AT LEAST 600 MILES BUT NOT MORE THAN 900 MILES AWAY) DESCRIBE WHAT NEEDS TO BE DONE TO PREPARE THE VEHICLE, SELECT THE SAFEST, MOST CONVENIENT, AND MOST ECONOMICAL ROUTE, DEVELOP A TIME AND MILEAGE SCHEDULE FOR PLANNED STOPS, AND COMPUTE THE ANTICIPATED COST FOR GAS.

SELECT TWO APPROPRIATE ROUTES TO DRIVE FROM ONE ADDRESS TO ANOTHER IN THE CITY IN WHICH YOU LIVE (OR FOR SMALL SCHOOLS--IN THE NEAREST LARGE CITY).

CONCEPTS

- Route Selection
  - Safety considerations
  - Convenience considerations
  - Economic considerations
- Vehicle Preparation
- Standard and Special Equipment
- Estimating Time and Planning Stops
- Map Reading

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ________________, pp. _________.
2. In a classroom group setting participate in a teacher-led exercise on map reading for city and country travel.
3. In a classroom group setting, participate in a teacher-led discussion on trip planning, including route selection and equipment to be carried in the car for city travel and long trips, and vehicle preparation, and estimating time and planning stops for long trips. For part of the discussion, transparency set T19a will be used.
4. Independently complete Worksheet W19a.

EVALUATION

1. Complete Evaluation E17a.

October, 1979

TEACHER-LED EXERCISE
(Student Learning Activity 2, Module 19)
(One Page Only)

1. Use a nearby large city map (at least one map for 2-3 students).
    a. Study map legend -- kinds of streets, etc.
    b. Explain grid for locating streets and addresses.
    c. Alphabetical listing of streets (north-south) and avenues (east-west).
    d. Have the students locate at least five addresses predetermined by you.
    e. Have the students identify several arterials and residential streets.

2. Use a Washington State Map (at least one map for 2-3 students).
    a. Study map legend -- kinds of streets, size of cities, etc.
    b. Note that grid is same as for city map.
    c. Note alphabetical listing of cities and towns.
    d. Other items such as recreational sites listed by grid.
    e. Note and show how to use mileage chart.
    f. Note to students how to find point to point mileages on the map.
    g. Point out any unique features the map may have.
    h. Have the students locate the following:
        (1) Brewster
        (2) Cusick
        (3) Chehalis
        (4) Burlington
        (5) Interstate 90
        (6) Interstate 5
        (7) Any U.S. Highway
        (8) Any State Highway
        (9) A city between 10,000 and 25,000 population
        (10) A town between 1,000 and 2,500 population

October, 1979

TEACHER-LED DISCUSSION
(Student Learning Activity 3, Module 19)
(Page 1 of 2 pages)

1. Using Washington state maps, describe the best route to take in regard to safety, convenience, and economy for the cities listed below. Point out why it is the best route. Point out a feasible alternate route(s) and explain why it (they) may be less safe, convenient, or economical -- or more, if that is the case.
   a. Yakima to Spokane
   b. Yakima to Tacoma
   c. Seattle to Wenatchee

2. Then have the students do the same for the following:
   a. Walla Walla to Spokane
   b. Seattle to Omak
   c. Local high school to Bellingham
   d. Local high school to Pasco

3. Using Transparency T19a, Page 1, inform the students of the equipment to be carried for city travel and for long trips.

4. Using Transparency T19a, Page 2, discuss preparing a car and selves for a long trip.

5. Using Transparency T19a, pp. 3, 4, and 5, estimate time and plan stops for a trip from Seattle to Idaho Falls, Idaho.

Directions:
   a. Use 3 overhead projectors simultaneously so the entire route can be shown at once.
   b. Have the students estimate the MPH average they would be likely to make considering the number of miles on expressway and the number of miles on 2-lane, going through towns, etc. (For time actually driving, it will be about 45-50 MPH.)
   c. Start them from Seattle at 8:00 A.M. for one exercise.
   d. Start them from Seattle at 3:00 P.M. for another exercise.
   e. Discuss the number of miles and time that ought to be a "rule of thumb" maximum per day.
   f. Once the transparencies are made, enclose the mileages in red, the Highways (designated by H and the number, e.g., H30) and Interstates (I and the number) in green, and the city names in blue.

      25 MI ↗ Red
      H395 ↖ I80N ↗ Green
      Ellensburg ↑ Blue

   g. Mileage for teacher information:

Mileage for teacher information:	Pt. to Pt.	Accumulative
Seattle to North Bend	25	25
North Bend to Cle Elum	55	80
Cle Elum to Ellensburg	24	104
Ellensburg to Yakima	31	135
Yakima to Tri-Cities	80	215
Tri-Cities to Umatilla	32	247
Umatilla to Pendleton	42	289
Pendleton to LaGrande	54	343

(Continue Page 2)

October, 1979

TEACHER-LED DISCUSSION
(Student Learning Activity 3, Module 19)
(Page 2 of 2 pages)

	Pt. to Pt.	Accumulative
LaGrande to Baker	42	385
Baker to Ontario	75	460
Ontario to Caldwell	32	492
Caldwell to Boise	28	520
Boise to Mountain Home	44	564
Mountain Home to Gooding	64	628
Gooding to Carey	63	691
Carey to Arco	41	732
Arco to Idaho Falls	68	800

OCTOBER, 1979

TRANSPARENCY T19A
(PAGE 1 OF 5 PAGES)

EQUIPMENT

TO BE CARRIED AT ALL TIMES (CITY TRAVEL):

- JACK
- LUG WRENCH
- SPARE TIRE
- FLASHLIGHT
- FIRST-AID KIT
- BATTERY JUMPER CABLES
- -- OPTIONAL, BUT IF ACQUIRED FOR A LONG TRIP, COULD BE LEFT IN CAR AT ALL TIMES:
    - SPARE BELTS
    - FUSES

LONG TRIPS:

ADD TO THE ABOVE:

- MISCELLANEOUS TOOLS--
    - SCREW DRIVER
    - PLIERS
    - CRESCENT/OPEN END WRENCHES
    - (SOCKET SET IF HAVE A SET)

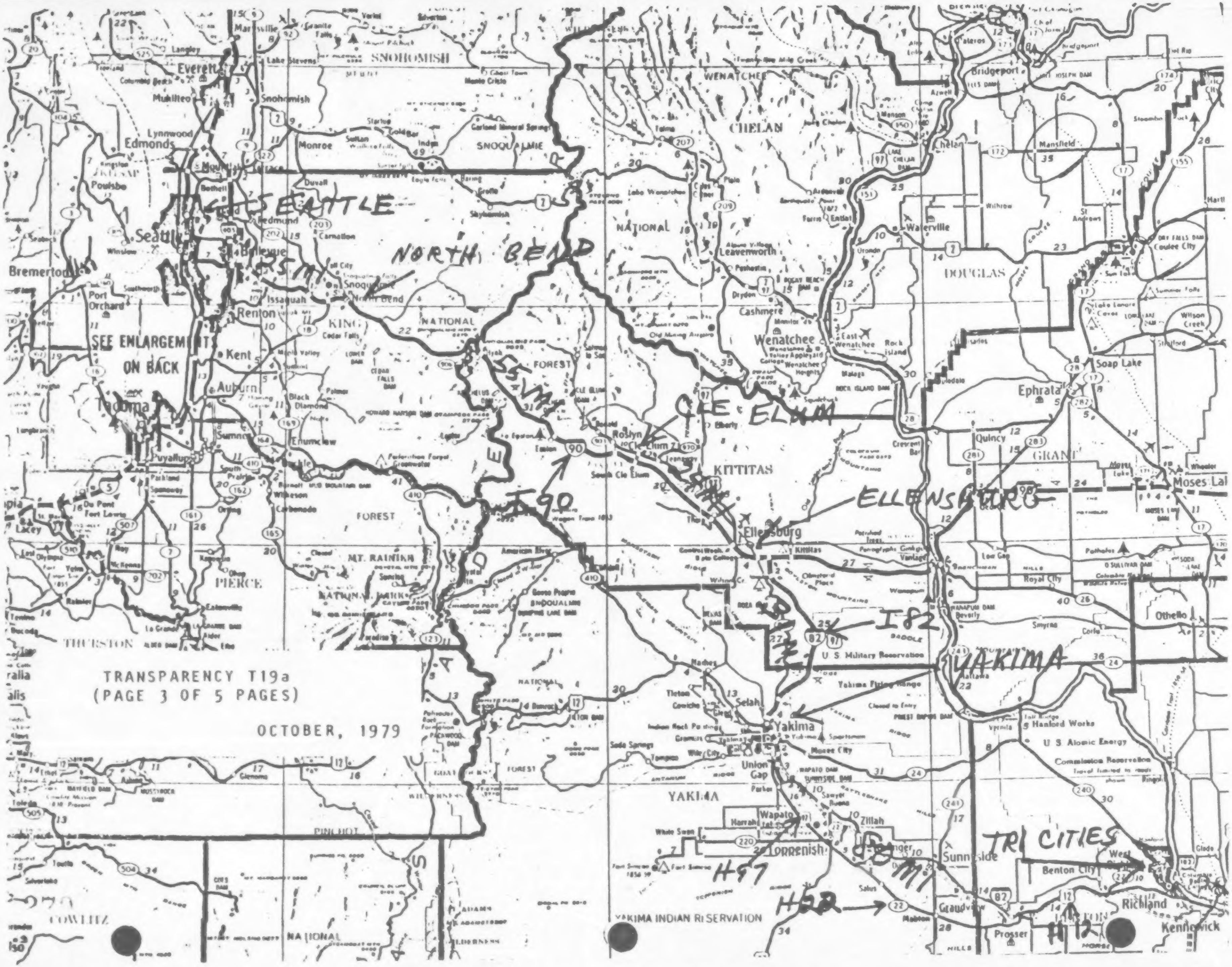
WINTER:

- WINDOW SCRAPER
- CHAINS
- TOW LINE
- BLANKET
- WARM CLOTHES TO WORK OUTSIDE OF CAR IN EMERGENCY

OCTOBER, 1979

TRANSPARENCY T19A
(PAGE 2 OF 5 PAGES)

1. CHECK AND SERVICE CAR AS NEEDED OR AS WILL BE NEEDED BEFORE RETURN:
    - TIRES; PRESSURE, BALANCE, ALIGNMENT
    - TUNE-UP
    - LUBRICATION
    - OIL CHANGE
    - WHEEL PACK
    - BRAKE LINING
    - WINDSHIELD WIPERS AND WASHERS
    - RADIATOR, HOSES, AND BELTS
    - AIR FILTER
    - LIGHTS
    - HORN
    - --OWNER'S MANUAL FOR ANY ITEMS SPECIFIC TO YOUR CAR--
2. BE PREPARED TO HANDLE PERSONAL NEEDS:
    - HOW TO PAY FOR EXPENSES -- GAS, FOOD, LODGING
    - EMERGENCIES
    - CLOTHING FOR ALL ANTICIPATED WEATHER AND CLIMATE
    - PLAN SCHEDULE FOR REST BEFORE AND DURING -- AND FOR AVOIDING RUSH HOUR IN CITIES.
    - OBTAIN ADVANCE INFORMATION ON WEATHER, ROAD CONDITIONS, CONSTRUCTION.
    - SPARE SET OF KEYS
3. LOADING THE CAR:
    - WEIGHT LOW AND CENTERED
    - MATERIALS SECURE
    - HEAVY OBJECTS IN TRUNK
    - ONLY "SOFT" LOOSE OBJECTS IN PASSENGER COMPARTMENT

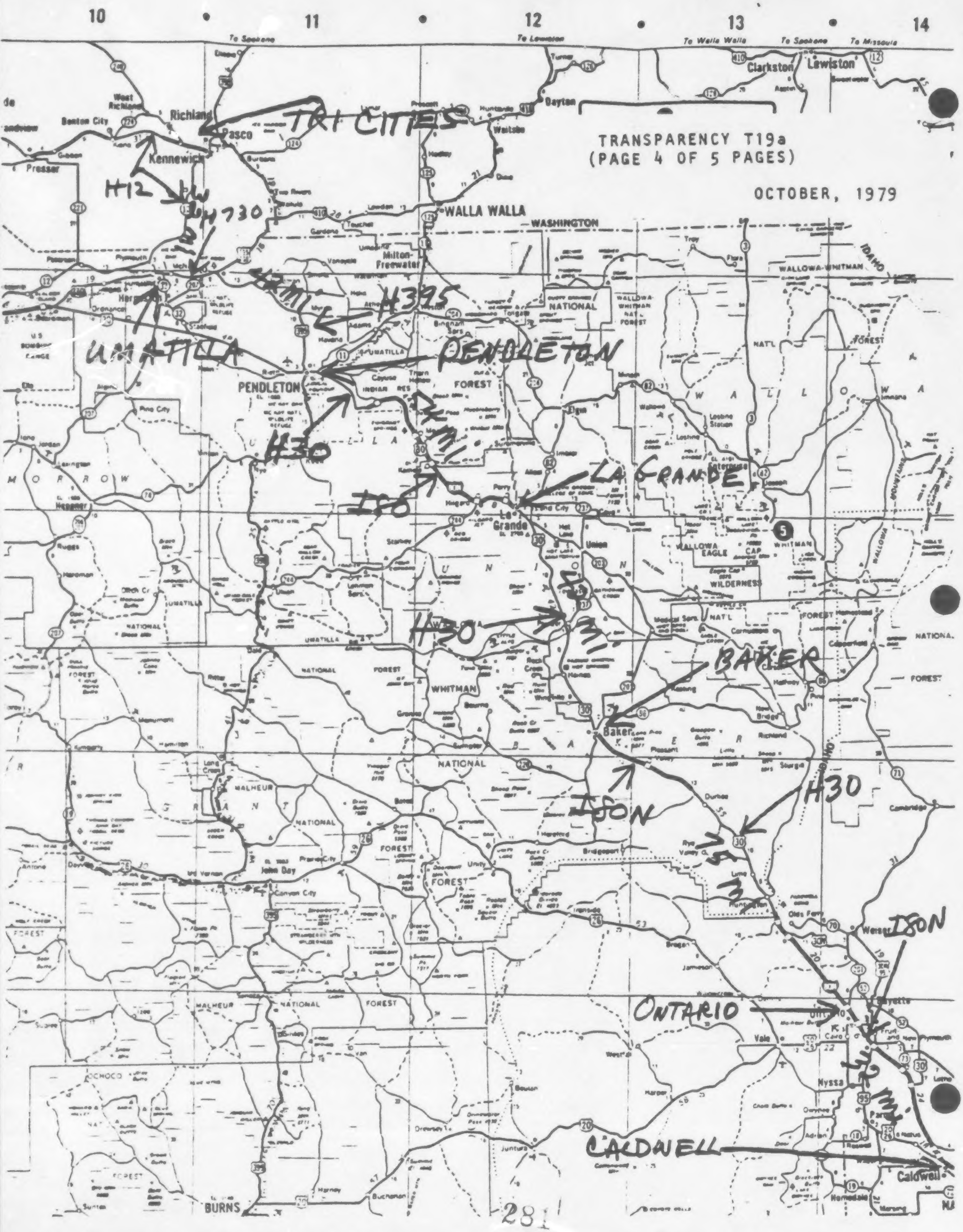

SEATTLE
25 MI
NORTH BEND
55 MI
CLE ELUM
I 90
ELLENSBURG
I 82
YAKIMA
TRI CITIES
H97
H22
H12
SEE ENLARGEMENT ON BACK
SNOHOMISH
KING
PIERCE
THURSTON
CHELAN
DOUGLAS
GRANT
KITTITAS
YAKIMA
COWLITZ
WENATCHEE
MT. RAINIER
YAKIMA INDIAN RESERVATION
U S Military Reservation
U S Atomic Energy Commission Reservation
Everett
Bremerton
Tacoma
Wenatchee
Ellensburg
Yakima
Richland
Kennewick

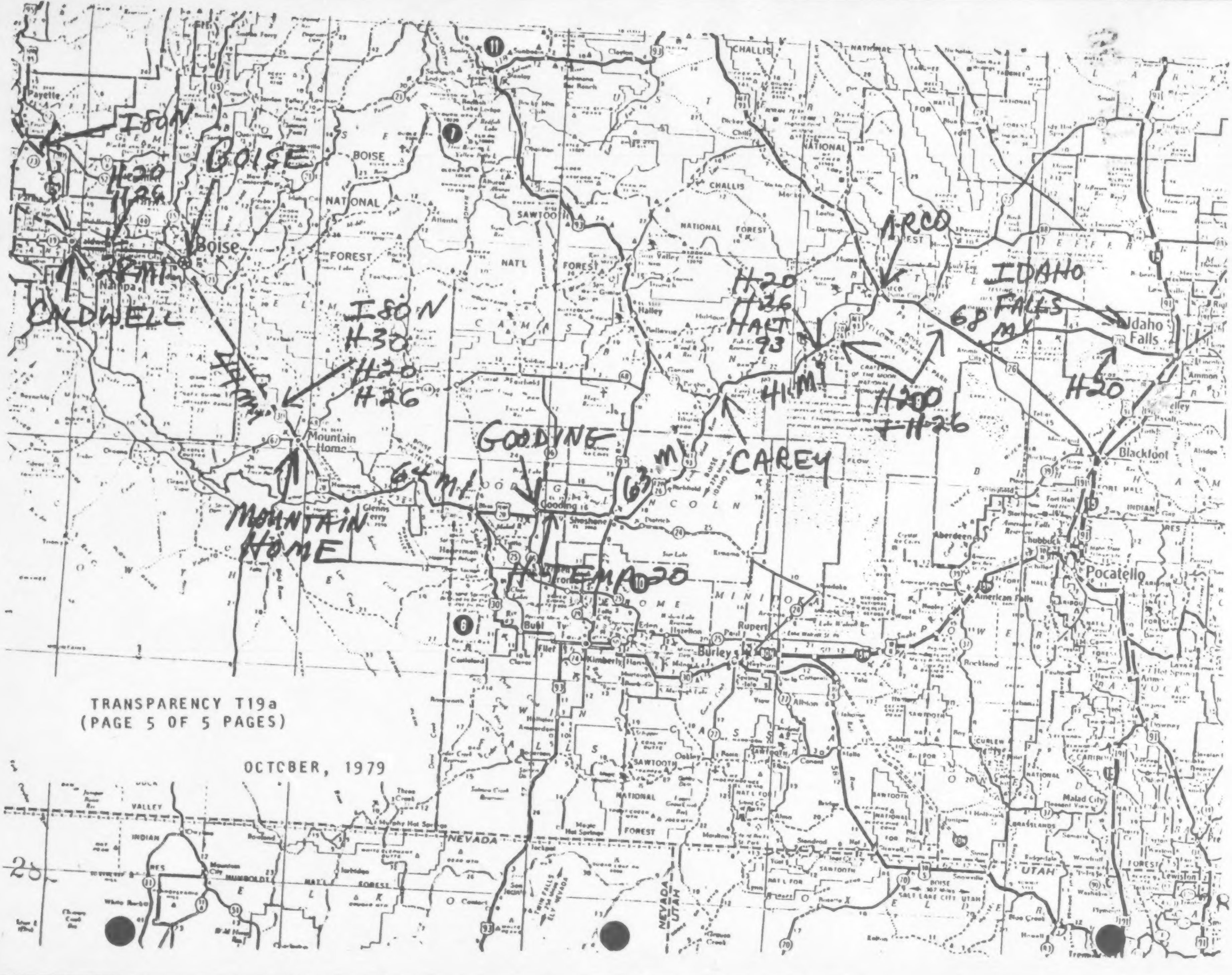
TRANSPARENCY T19a
(PAGE 3 OF 5 PAGES)

OCTOBER, 1979

TRANSPARENCY T19a
(PAGE 4 OF 5 PAGES)

OCTOBER, 1979


10
11
12
13
14
TRI CITIES
Richland
Pasco
Kennewick
H12
H730
H395
UMATILLA
PENDLETON
H30
I80
LA GRANDE
WALLA WALLA
WASHINGTON
IDAHO
H30
BAKER
I80N
H30
ISON
ONTARIO
CALDWELL
BURNS


I80N
BOISE
H20
H26
28 mi
CALDWELL
I80N
H30
H20
H26
44 mi
MOUNTAIN HOME
64 mi
GOODING
63 mi
H TEMP 20
CAREY
H20
H26
HALT 93
41 mi
H20
H26
ARCO
IDAHO FALLS
68 mi
H20

TRANSPARENCY T19a
(PAGE 5 OF 5 PAGES)

OCTCBER, 1979

28

83

October, 1979

WORKSHEET W19a
(Page 1 of 2 pages)

Map Reading, Trip Planning

1. Using a Washington state map, describe the best route to take in regard to safety, convenience, and economy for the cities listed below. Point out a feasible alternate route and explain why it may be less safe, convenient, or economical -- or more, if that is the case.

   a. Pullman to Wenatchee
      (1) Best Route

      (2) Alternate feasible route.

         (a) Explanation

   b. Spokane to Vancouver, WA
      (1) Best Route

      (2) Alternate feasible route.

         (a) Explanation

   c. Local high school to Aberdeen
      (1) Best Route

      (2) Alternate feasible route.

         (a) Explanation

   d. Local high school to Colville
      (1) Best Route

      (2) Alternate feasible route.

         (a) Explanation

   e. Local high school to Kelso
      (1) Best Route

      (2) Alternate feasible route.

         (a) Explanation

WORKSHEET W19a
(Page 2 of 2 pages)

2. Using a map of a large city (the one in which you live or any large city in Washington), locate two addresses in different parts of the city and describe two feasible routes betwaen the two. (Example: From 2223 W. Cherry Street, go north 6 blocks to 2nd Ave., turn right and go 15 blocks on 2nd Ave. to Boston Ct., etc.)

   Repeat twice more, using various addresses located in different parts of the city. Do not choose sites in which routes would coincide with routes in the other two.

   a.

   b.

   c.

October, 1979

Directions for Teachers for Evaluation E19a

1. At the top of E17a, Question A, write the name of your town or city and a city you choose that is 600 to 900 miles away. Try to choose a city that will require the students to determine between alternate routes and one for which the best all-around route requires changes of highways. For Question B, choose two addresses some distance apart in the city where you are located (or in the nearest large city) and write them on the first two spaces. Write the name of the city on the third space. Choose addresses that will require some direction changes.

2. Supply maps of the states in which the route for the long trip must be planned, Question A. Also supply maps of the city for Question B.

3. For correcting:

   1. Award 4 points for choosing the overall best route. Award one point for every two accurate items re map reading and description of the route up to a total of 6 points. Subtract one point for each incorrect or inaccurate item.
   2. Award one point for each appropriate time, mileage and stop described up to a total of 8 points. Some subjective judgment will be needed on your part but basically a short rest is needed for 2 hours and 100 miles, and 8 hours and 400 miles are average maximums for one day's travel.

   A#3. Award one point for each correct item up to a total of three points. Subtract one point for each inappropriate answer (such as "a jack" because it should be carried at all times).

   Correct answers are: chains, battery jumper cables, window scraper, tow line, blanket, warm clothes to work on car in emergency. You may receive other answers which you will have to judge as correct, incorrect, or inappropriate.

   B#3. Award 2 points for each appropriate route. Award one point for accuracy re maps reading and description for each route.

4. This test can be easily varied by changing the entries of cities and addresses.

October, 1979

EVALUATION E19a
(One page only)

Answer the following questions on a separate sheet of paper. Total points possible are 25. A total of 18 points is needed to pass.

A. For a trip from ____________________ to ______________________.

1. Describe the route you would take that would provide the safest, most convenient and most economical combined. (E.g., for a trip from Yakima to Calgary, Alberta, Canada: Leave Yakima by I82 traveling north toward Ellensburg, from Ellensburg travel east on I90 to Spokane, from Spokane travel north on U.S. Highway 2 to Cranbrook, B.C., Canada, etc.) (10 points)
2. List the times and mileages to planned stops on the trip. Planned leaving time is 9:00 A.M. Define the stop and the time for each stop. (E.g., for trip from Yakima to Calgary, travel about two hours, 100 miles, to Moses Lake, stop for short rest stop, 5 to 10 minutes; travel about two hours, 100 miles to Spokane, stop for about one hour for lunch, etc.) (6 points)
3. What equipment should you carry in the car that normally you wouldn't have when making the trip in December? (3 points)

B. For travel between ____________________ and _______________ in _____________, describe two appropriate routes to drive. (6 points)

October, 1979

MODULE 20: LEGAL AND POST-CRASH RESPONSIBILITIES

OBJECTIVE

WHEN PRESENTED WITH A SET OF OBJECTIVE QUESTIONS ON LEGAL RESPONSIBILITIES OF VEHICLE OWNERS AND OPERATORS TOWARD DRIVER LICENSING AND VEHICLE REGISTRATION, LICENSING, AND INSURING, AND ON PROCEDURES AND RESPONSIBILITIES IN POST-CRASH EMERGENCIES, THE STUDENT WILL ANSWER WITH 75% ACCURACY.

CONCEPTS

Responsibilities of vehicle owners and drivers regarding:
  - Driver licensing
  - Vehicle registration and licensing
  - Insurance, types and requirements
  - Cooperating with police and courts

Procedures and responsibilities in Post-Crash emergencies:
  - Stopping for an accident -- when and where
  - Marking and controlling the scene of an accident
  - Assisting the injured
  - Gathering and exchanging information
  - Calling for assistance
  - Reporting an accident

STUDENT LEARNING ACTIVITIES

1. Independently read textbook _______________, pp. ___________.
2. Independently read "Driver's Guide," State of Washington, pp. 8-10, 12-14, 58-60, and 60-62.
3. In a classroom group setting, view "Accident Take One" (FS/C).
4. Independently read, "A Student's Guide to Car Insurance."
5. In a classroom group setting, participate in a teacher-led discussion on driver licensing and vehicle registration and licensing, and obligations to cooperate with police and courts.
6. Participate in a classroom group session presented by an insurance agent or broker.
7. Independently complete Worksheet W20a, accident report form.
8. Independently complete Worksheet W20b.
9. Independently complete Worksheet W20c.

EVALUATION

1. Complete Evaluation E20.

October, 1979

TEACHER-LED DISCUSSION
(Student Learning Activity 5, Module 20)
(Page 1 of 2 pages)

Ask the students the following questions:

1. What is a "valid driver's license" in the State of Washington.

   Answer: For residents--Washington driver's license.
   For non-residents--current driver's license from home state.

2. What is an endorsement on a driver's license?

   Answer: Needed to be legal to drive special vehicles.

3. What endorsements are required in Washington?

   Answer: Motorcycle, Intermediate (for driving buses, and three-axle trucks), Combination (for driving trucks or truck-tractors pulling trailers or semi-trailers with a gross weight of more than 5,000 lbs.).

4. What are four conditions under which an individual will be disqualified for a license?

   Answer: Charged with moving violation and failed to appear in court, during period of suspension or revokation, habitual drunkard or habitual user or drugs, judged physically or mentally incompetent to safely drive.

5. How often and when must a Washington driver's license be renewed? and when?

   Answer: Every two years on the driver's birthday.

6. If a license is not renewed before it expires, what may the DOL require?

   Answer: Examination, written and/or driving.

7. What is required of a person in regard to his/her driver's license who changes address or legal name?

   Answer: Must notify DOL within 10 days.

8. What is meant by "Financial Responsibility" as a licensed driver in Washington?

   Answer: If you drive, you assume responsibility for safety and financial security of others in case of an accident.

9. What has state law defined as necessary to meet Financial Responsibility?

   Answer: If a driver can satisfy a claim through personal assets; or if he/she has at least a 15/30/5 liability policy.

10. Under what conditions does the financial responsibility law apply and must the driver file an accident report?

    Answer: $300.00 to the property of any one person, an injury that requires a doctor's treatment, or a death.

11. If a person fails to meet the "financial responsibility" after an accident, what will be required of him/her before they can get a license?

    Answer: He/she will be required to file proof of financial responsibility.

12. All vehicles must be registered with the Department of Licensing. What is the procedure? For Washington vehicles previously registered or new?

    Answer: Apply county auditor or authorized agent. Take properly signed title, registration, and bill of sale when applying.

TEACHER-LED DISCUSSION
(Student Learning Activity 5, Module 20)
(Page 2 of 2 pages)

12. (Continued)
For vehicles previously registered out-of-state?

Answer: Apply county auditor. Call ahead to find out what is needed. Vehicle must be inspected by the Washington State Patrol--information on where is available from the county auditor's office.

13. When a car is sold privately, what is the responsibility of the owner-seller?

Answer: Report (write on the title) the odometer reading, write the name of the purchaser in the space provided on the title, sign and date with the date of sale, give the signed title to the purchaser, and notify the DOL of the sale within five days.

Of the purchaser:

Answer: Transfer the registration and title within 15 days.

14. What are some examples of the obligation vehicle operators have to cooperate with police and courts?

Possible Answers:
- Appear in court when requested if witnessed an accident.
- Stop when signalled to do so by a police officer.
- Sign a citation for appearance in court or accompany a police officer to the station when requested if cited for a traffic violation.
- Appear in court or post bond after having been cited.
- Assist a police officer at the scene of an accident if requested.

October, 1979

DIRECTIONS
(Student Learning Activity 6, Module 20)
(One Page Only)

The following is an outline of points to be explained or made by the speaker on Insurance in SLA6. (These are not cast in stone, but if the speaker has other items he/she wishes to present, ask him/her to clear them through you.) This outline should be discussed with the speaker enough in advance of the presentation so the speaker has time to prepare. (The speaker should be limited to a maximum of 30 minutes.) The speaker should be directed to leave enough time for questions from the class and clarify if he/she wants questions during or at the end of the presentation.

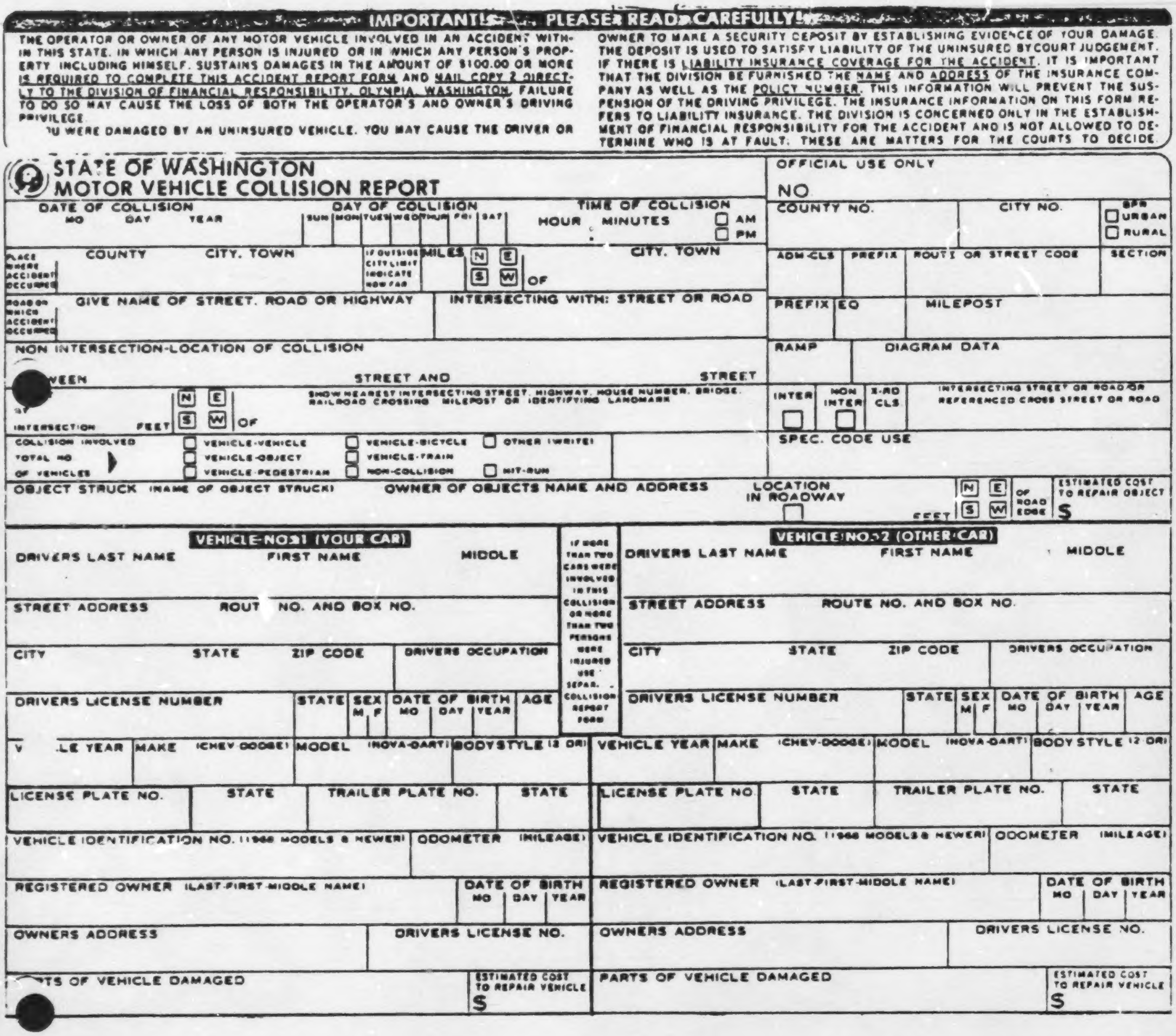
Preface: A reminder that the language for any specific body of knowledge or endeavor (insurance included) is quite technical to most but those directly involved. Please endeavor to explain in layman's terms.

1. What is the basic meaning of insurance? How does it work?
2. An explanation of what is meant by and what get's paid with:
    a. Liability Insurance
        (1) Bodily Injury
        (2) Property Damage
        (3) Limitations e.g., 15/30/5
    b. Uninsured Motorist
    c. Medical Payments/Personal Injury Protection
    d. Collision
    e. Comprehensive
3. What is meant by "deductible"?
4. What coverages are suggested for various values in vehicles?
5. How are rates for insurance determined?
6. Why do some companies have lower rates than others for the same coverage?
7. Explain the Financial Responsibility Law in Washington State.
8. What effect would there be if insurance was outright required on every vehicle before a license could be obtained rather than having a financial responsibility law?
9. What is meant by "Insurance Agent?" "Insurance Broker"?
10. What criteria should a person use for selecting an insurance company, agent, or broker?
11. What is meant by "Assigned Risk"?
12. What is no-fault insurance? How does it work? What are the advantages and disadvantages?
13. Explain the term, "contributory negligence."

October, 1979

WORKSHEET W20a
(Page 1 of 2 pages)

Directions: Find a description of an accident in the newspaper. Using it, complete the required accident report on the following form, making yourself one of the drivers. Some detail will have to be supplied by you that may not appear in the article. Do not leave anything blank that you would have had to fill out if you had actually had the accident.



IMPORTANT! PLEASE READ CAREFULLY!

THE OPERATOR OR OWNER OF ANY MOTOR VEHICLE INVOLVED IN AN ACCIDENT WITHIN THIS STATE, IN WHICH ANY PERSON IS INJURED OR IN WHICH ANY PERSON'S PROPERTY INCLUDING HIMSELF, SUSTAINS DAMAGES IN THE AMOUNT OF $100.00 OR MORE IS REQUIRED TO COMPLETE THIS ACCIDENT REPORT FORM AND MAIL COPY 2 DIRECTLY TO THE DIVISION OF FINANCIAL RESPONSIBILITY, OLYMPIA, WASHINGTON. FAILURE TO DO SO MAY CAUSE THE LOSS OF BOTH THE OPERATOR'S AND OWNER'S DRIVING PRIVILEGE.

U WERE DAMAGED BY AN UNINSURED VEHICLE, YOU MAY CAUSE THE DRIVER OR OWNER TO MAKE A SECURITY DEPOSIT BY ESTABLISHING EVIDENCE OF YOUR DAMAGE. THE DEPOSIT IS USED TO SATISFY LIABILITY OF THE UNINSURED BY COURT JUDGEMENT. IF THERE IS LIABILITY INSURANCE COVERAGE FOR THE ACCIDENT, IT IS IMPORTANT THAT THE DIVISION BE FURNISHED THE NAME AND ADDRESS OF THE INSURANCE COMPANY AS WELL AS THE POLICY NUMBER. THIS INFORMATION WILL PREVENT THE SUSPENSION OF THE DRIVING PRIVILEGE. THE INSURANCE INFORMATION ON THIS FORM REFERS TO LIABILITY INSURANCE. THE DIVISION IS CONCERNED ONLY IN THE ESTABLISHMENT OF FINANCIAL RESPONSIBILITY FOR THE ACCIDENT AND IS NOT ALLOWED TO DETERMINE WHO IS AT FAULT. THESE ARE MATTERS FOR THE COURTS TO DECIDE.

STATE OF WASHINGTON
MOTOR VEHICLE COLLISION REPORT

OFFICIAL USE ONLY
NO

DATE OF COLLISION: MO / DAY / YEAR
DAY OF COLLISION: SUN / MON / TUES / WED / THUR / FRI / SAT
TIME OF COLLISION: HOUR : MINUTES ☐ AM ☐ PM
COUNTY NO. | CITY NO. | SPR ☐ URBAN ☐ RURAL

PLACE WHERE ACCIDENT OCCURRED: COUNTY | CITY, TOWN | IF OUTSIDE CITY LIMIT INDICATE HOW FAR: MILES N E S W OF | CITY, TOWN
ADM-CLS | PREFIX | ROUTE OR STREET CODE | SECTION

ROAD ON WHICH ACCIDENT OCCURRED: GIVE NAME OF STREET, ROAD OR HIGHWAY | INTERSECTING WITH: STREET OR ROAD
PREFIX | EQ | MILEPOST

NON INTERSECTION-LOCATION OF COLLISION
EEN _____ STREET AND _____ STREET
RAMP | DIAGRAM DATA

AT INTERSECTION _____ FEET N E S W OF _____ SHOW NEAREST INTERSECTING STREET, HIGHWAY, HOUSE NUMBER, BRIDGE, RAILROAD CROSSING, MILEPOST OR IDENTIFYING LANDMARK
INTER ☐ | NON INTER ☐ | X-RD CLS | INTERSECTING STREET OR ROAD OR REFERENCED CROSS STREET OR ROAD

COLLISION INVOLVED / TOTAL NO OF VEHICLES ▶
☐ VEHICLE-VEHICLE ☐ VEHICLE-BICYCLE ☐ OTHER (WRITE)
☐ VEHICLE-OBJECT ☐ VEHICLE-TRAIN
☐ VEHICLE-PEDESTRIAN ☐ NON-COLLISION ☐ HIT-RUN
SPEC. CODE USE

OBJECT STRUCK (NAME OF OBJECT STRUCK) | OWNER OF OBJECTS NAME AND ADDRESS | LOCATION IN ROADWAY ☐ | FEET N E S W OF ROAD EDGE | ESTIMATED COST TO REPAIR OBJECT $

IF MORE THAN TWO CARS WERE INVOLVED IN THIS COLLISION OR MORE THAN TWO PERSONS WERE INJURED USE SEPAR. COLLISION REPORT FORM

VEHICLE NO. 1 (YOUR CAR)	VEHICLE NO. 2 (OTHER CAR)
DRIVERS LAST NAME / FIRST NAME / MIDDLE	DRIVERS LAST NAME / FIRST NAME / MIDDLE
STREET ADDRESS / ROUT NO. AND BOX NO.	STREET ADDRESS / ROUTE NO. AND BOX NO.
CITY / STATE / ZIP CODE / DRIVERS OCCUPATION	CITY / STATE / ZIP CODE / DRIVERS OCCUPATION
DRIVERS LICENSE NUMBER / STATE / SEX M F / DATE OF BIRTH MO DAY YEAR / AGE	DRIVERS LICENSE NUMBER / STATE / SEX M F / DATE OF BIRTH MO DAY YEAR / AGE
V LE YEAR / MAKE (CHEV-DODGE) / MODEL (NOVA-DART) / BODYSTYLE (2 DR)	VEHICLE YEAR / MAKE (CHEV-DODGE) / MODEL (NOVA-DART) / BODY STYLE (2 DR)
LICENSE PLATE NO. / STATE / TRAILER PLATE NO. / STATE	LICENSE PLATE NO. / STATE / TRAILER PLATE NO. / STATE
VEHICLE IDENTIFICATION NO. (1968 MODELS & NEWER) / ODOMETER (MILEAGE)	VEHICLE IDENTIFICATION NO. (1968 MODELS & NEWER) / ODOMETER (MILEAGE)
REGISTERED OWNER (LAST-FIRST-MIDDLE NAME) / DATE OF BIRTH MO DAY YEAR	REGISTERED OWNER (LAST-FIRST-MIDDLE NAME) / DATE OF BIRTH MO DAY YEAR
OWNERS ADDRESS / DRIVERS LICENSE NO.	OWNERS ADDRESS / DRIVERS LICENSE NO.
TS OF VEHICLE DAMAGED / ESTIMATED COST TO REPAIR VEHICLE $	PARTS OF VEHICLE DAMAGED / ESTIMATED COST TO REPAIR VEHICLE $

October, 1979

WORKSHEET W20a
(Page 2 of 2 pages)

LIABILITY INSURANCE INFORMATION-VEHICLE NO. 1 WAS THERE AUTOMOBILE LIABILITY INSURANCE COVERAGE IN EFFECT FOR THIS ACCIDENT ON YOUR CAR ☐ YES ☐ NO

NAME AND ADDRESS OF LIABILITY INSURANCE POLICY HOLDER NAME	ADDRESS	CITY	STATE	ZIP	NAME OF LIABILITY INSURANCE COMPANY
NAME AND ADDRESS OF LIABILITY INSURANCE AGENT		CITY	STATE	ZIP	LIABILITY POLICY NUMBER

TOTAL INJURED ☐

1ST INJURY AGE
NAME
ADDRESS SEX M ☐ F ☐
NATURE AND EXTENT OF INJURIES
DID INJURIES REQUIRE EXAMINATION BY A DOCTOR? ☐ NO ☐ YES DOCTORS NAME

STATUS OF INJURED
☐ DRIVER
☐ PASSENGER
☐ PEDESTRIAN
☐
IN VEHICLE No

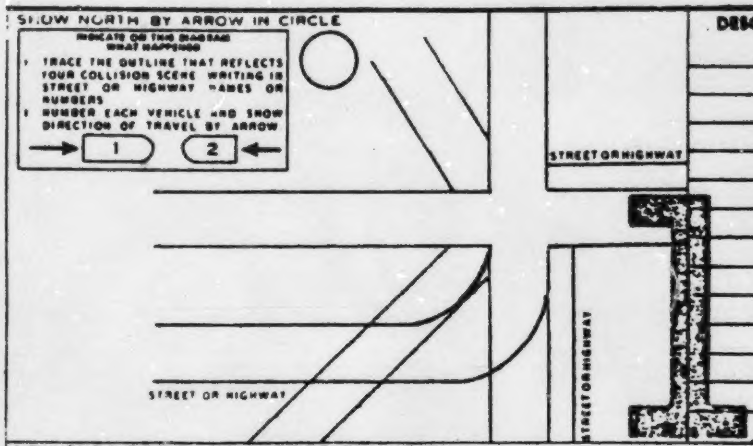
MARK FIRST ONE THAT APPLIES
KILLED ☐
DISABLING INJURY (SEVERE) 5 ☐
NON-DISABLING INJURY (MINOR) 6 ☐
POSSIBLE INJURY (I.E. COMPLAINT OF PAIN ETC.) 7 ☐

2ND INJURY: (USE SEPARATE REPORT FOR ADDITIONAL INJURIES) AGE
NAME
ADDRESS SEX M ☐ F ☐
NATURE AND EXTENT OF INJURIES
DID INJURIES REQUIRE EXAMINATION BY A DOCTOR? ☐ NO ☐ YES DOCTORS NAME

STATUS OF INJURED
☐ DRIVER
☐ PASSENGER
☐ PEDESTRIAN
☐
IN VEHICLE No

MARK FIRST ONE THAT APPLIES
KILLED ☐
DISABLING INJURY (SEVERE) 5 ☐
NON-DISABLING INJURY (MINOR) 6 ☐
POSSIBLE INJURY (I.E. COMPLAINT OF PAIN ETC.) 7 ☐

SHOW NORTH BY ARROW IN CIRCLE


INDICATE ON THIS DIAGRAM WHAT HAPPENED
1 TRACE THE OUTLINE THAT REFLECTS YOUR COLLISION SCENE WRITING IN STREET OR HIGHWAY NAMES OR NUMBERS
2 NUMBER EACH VEHICLE AND SHOW DIRECTION OF TRAVEL BY ARROW
1
2
STREET OR HIGHWAY
STREET OR HIGHWAY
STREET OR HIGHWAY

DESCRIBE, BELOW, WHAT HAPPENED: (REFER TO VEHICLES BY NUMBER)

FOLD

VEHICLES POSITIONS BEFORE COLLISION

VEHICLE	HEADED N	S	E	W	ON STREET OR HIGHWAY NAME OR NO.	NO. OF LANES IN ONE DIRECTION	VEHICLE LEGALLY PARKED YES	NO	IF PARKED WAS VEHICLE OCCUPIED YES	NO
NO 1 (YOUR)	☐	☐	☐	☐			☐	☐	☐	☐
NO 2 (OTHER)	☐	☐	☐	☐			☐	☐	☐	☐
PEDESTRIAN	☐	☐	☐	☐	ALONG OR CROSSING	FROM	TO			

INVESTIGATED BY
☐ STATE PATROL
☐ CITY POLICE
☐ SHERIFF
☐ OTHER POLICE
☐ NO INVESTIGATION

PEDESTRIAN WAS USING 1 ☐ SIDEWALK 2 ☐ WALKWAY 3 ☐ SHOULDER 4 ☐ MARKED CROSSWALK 5 ☐ UNMARKED CROSSWALK 6 ☐ OTHER

ROAD SURFACE (CHECK ONE)
1 ☐ DRY
2 ☐ WET
3 ☐ SNOW
4 ☐ ICE
5 ☐ OTHER SPECIFY

WEATHER
1 ☐ CLEAR
2 ☐ RAINING
3 ☐ SNOWING
4 ☐ FOG
5 ☐ OTHER SPECIFY

REASON FOR NOT SEEING DANGER (OBSCURED VISION DISTRACTIONS ETC.)

LIGHT CONDITIONS
1 ☐ DAYLIGHT
2 ☐ DAWN
3 ☐ DUSK
4 ☐ DARK-STREET LIGHTS ON
5 ☐ DARK-STREET LIGHTS OFF
6 ☐ DARK-NO STREET LIGHTS
7 ☐ OTHER SPECIFY

TRAFFIC CONTROL (CHECK ONE).

VEHICLE NO 1		NO 2	
☐	1	☐	SIGNALS
☐	2	☐	STOP SIGN
☐	3	☐	YIELD SIGN
☐	4	☐	FLASHING RED
☐	5	☐	FLASHING AMBER
☐	6	☐	RR SIGNAL
☐	7	☐	OFFICER/FLAGMAN
☐	8	☐	OTHER SPECIFY

TYPE OF ROAD (CHECK ONE OR MORE)

VEHICLE NO 1		NO 2	
☐	1	☐	ONE WAY
☐	2	☐	TWO WAY
☐	3	☐	REVERSIBLE ROAD
☐	4	☐	INTERCHANGE (LOOP/ RAMP)
☐	5	☐	ALLEY
☐	1	☐	SEPARATED
☐	2	☐	DIVIDED
☐	3	☐	UNDIVIDED

DRIVER/VEHICLE ACTIONS (CHECK ONE OR MORE)

VEHICLE NO 1		NO 2	
☐	1	☐	GOING STRAIGHT AHEAD
☐	2	☐	OVERTAKING AND PASSING
☐	3	☐	MAKING RIGHT TURN
☐	4	☐	MAKING LEFT TURN
☐	5	☐	MAKING U-TURN
☐	6	☐	SLOWING
☐	7	☐	STOPPED FOR TRAFFIC
☐	8	☐	STOPPED AT SIGNAL OR STOP SIGN
☐	9	☐	STOPPED ON SHOULDER
☐	10	☐	OTHER (SPECIFY)

WITNESS NAME	ADDRESS	SEX	AGE
1			
2			

SIGNATURE OF PERSON COMPLETING REPORT	ADDRESS	DATE OF REPO MO	DAY	YE
X				

DISTRIBUTION OF COPIES
SHEET NO. 1 WASHINGTON STATE PATROL - OLYMPIA, WASHINGTON
SHEET NO. 2 TO DEPT. OF MOTOR VEHICLES - DIVISION OF FINANCIAL RESPONSIBILITY - OLYMPIA, WASHINGTON
SHEET NO. 3: TO LOCAL LAW ENFORCEMENT AGENCY WHERE THE ACCIDENT OCCURRED
SHEET NO. 4: TO CITY ENGINEER IF APPLICABLE
SHEET NO. 5: YOUR COPY

SF 4859 (REV 1-70)

WORKSHEET W20b
(Page 1 of 3 pages)

October, 1979

Name ____________________

1. After each of the following general statements about insurance coverage, write what type of insurance provides it.

Statement	What type of insurance?
1. Protects the insured against damages for a personal injury or a death caused by his car.	
2. Protects the insured when his car damages other people's property.	
3. Covers the insured and his family if injured by a hit-and-run driver.	
4. Covers medical care up to a certain amount for the insured and any passengers injured in the insured person's car, no matter who was to blame.	
5. Pays the insured for collision damage to his own car.	
6. Covers the insured against damage of fire, theft, or breakage of glass.	

2. On the following chart, check first which types of insurance all car owners probably should carry. Then check in the next column the types you would consider *required* and briefly explain all your answers.

Type of insurance	Should be carried	Should be required	Explain
Bodily-Injury Liability			
Property-Damage Liability			
Uninsured Motorist			
Medical Payments			
Collision			
Comprehensive			

3. On the following chart check the proper column to show whether each item would make a car owner's insurance rates higher or lower.

Item	Higher	Lower
1. Owner lives in rural area. Uses car only for pleasure.		
2. Owner has had three small claims, following *no* claims.		
3. Owner uses car for business.		
4. Owner lives in a big city or big-city suburb.		
5. Young driver has completed a high-school driver-education course successfully.		

4. What does a financial responsibility law require? ____________________

____

____

October, 1979

WORKSHEET W20b
(Page 2 of 3 pages)

5. A certain family owns a new-model medium-priced car with six cylinders and no optional equipment. It is used daily by the father to drive to work. It is also used as a family car, driven by the father or the mother. It is insured by a policy that covers Bodily-Injury Liability, Property-Damage Liability. Uninsured Motorist, Medical-Payment, Collision ($50) deductible), and Comprehensive insurance.

Indicate by checking the proper column whether the total insurance cost would be more or less than at present, after each event at the left in the chart, and tell which type of insurance is affected in price and why.

Event	Less	More	Which type of insurance is affected in price and why:
1. The car has been driven for three years without a claim, and drivers have had no moving violations.			
2. The owner changes the $50 Deductible to $100 Deductible.			
3. The owner changes engines; puts in an 8-cylinder, souped-up engine.			
4. A son, 16, get license and drives car (no driver education).			

6. In each of the following specific situation, check the column under the letter of the kind of automobile insurance that would protect you.

A Bodily-Injury Liability
B Property-Damage Liability
C Uninsured Motorist
D Medical Payments
E Collision
F Comprehensive

Situation	A	B	C	D	E	F
1. You overturn your car; no other car or property is involved.						
2. You strike a parked car.						
3. You are involved in an accident with another moving car — your fault.						
4. Same as above but his fault. You cannot prove this.						
5. Your parked car is struck by a hit-and-run driver (unlocked).						
6. Your car is stolen.						
7. You drive into a service station and strike a gasoline pump.						
8. Your car strikes a pedestrian — your fault.						
9. As a pedestrian, you wish to protect yourself financially in case of ever being struck by a car.						
10. Your car is struck by a driver with no insurance, no assets.						
11. A storm breaks the windshield.						
12. In an accident (your fault) the other driver is injured.						

October, 1979

WORKSHEET W20b
(Page 3 of 3 pages)

7. Describe what is meant by "Assigned Risk."

8. Describe how you would go about selecting what insurances you would purchase and selecting a company and/or agent.

9. What is no-fault insurance? Would you support legislation for no-fault insurance? Why?

October, 1979

WORKSHEET W20c
(One Page Only)

A. Of course you do not plan to be involved in an accident. However, if you were in one in which people were injured, what important things should be done first?

1. ______________________________

2. ______________________________

3. ______________________________

4. ______________________________

a. List five or more other necessary things a driver must do after being involved in an accident.

1. ____________ 4. ____________
2. ____________ 5. ____________
3. ____________ Other: ____________

B. The actions of first person to reach an accident are listed. Tell why this person does each action listed.

1. Park well off roadway. ____________
2. Turn off ignition of wrecked cars. ____________
3. Give aid to injured without moving them. ____________
4. Recruit help and call police, doctor, ambulance. ____________
5. Have someone set flares or flag cars. ____________
6. Turn headlight beams on wrecked cars. ____________
7. Keep people away if inflammables are exposed. ____________

C. What is one moral obligation a person has who witnesses an accident?

October, 1979

EVALUATION E20a
(Page 1 of 3 pages)

Directions: Write the letters of the correct answers on the separate answer sheet. A total of 19 points is needed to pass. (Each question is worth one point).

1. Which insurance coverage can be purchased to prevent financial loss in case of fire or theft?

a). Comprehensive	c). Liability
b). Collision	d). Uninsured motorist

2. An important point to remember concerning accidents and liability insurance is that:

   a). You can be legally in the right but remain responsible for damages.
   b). As long as you are legally correct, the accident will never be your fault.
   c). You must be convicted of a traffic offense in court to be at fault.
   d). A police accident investigation must be completed before you can be at fault.

3. Which insurance coverage can be purchased to cover the cost of replacing a telephone post which you destroyed as a result of a traffic accident?

a). Comprehensive	c). Liability
b). Collision	d). Uninsured motorist

4. Which kind of auto insurance would pay for repairing your car if it was damaged by a hit-and-run driver or a driver who has no way to pay costs?

a). Comprehensive	c). Liability
b). Collision	d). Uninsured motorist

5. The liability coverage 15/30/10 refers to:

   a). $15,000 for death or bodily injury to one person, $30,000 for all persons injured or killed, and $10,000 for damage to property.
   b). $15,000 damage to property, $30,000 for damage to persons, and $10,000 for miscellaneous.
   c). Policy limits for uninsured motorist protection.
   d). Ages of insured drivers.

6. Which kind of auto insurance protects you and all members of your family if injured by a hit-and-run driver or a driver who has no way to pay costs?

a). Comprehensive	c). Liability
b). Collision	d). Uninsured motorist

7. The main purpose of automobile insurance is:

   a). To determine guilt in collisions.
   b). For protection against financial loss.
   c). To encourage good driving.
   d). To prevent accidents.

8. Under no-fault insurance plans, a driver collects limited losses for damages due to a collision from:

   a). His own insurance company.
   b). The other driver's insurance company.
   c). The state government's insurance department.
   d). No one, and he must pay for limited damages out of his own pocket.

9. If you have a liability policy with 20/40 limits and the court awards $30,000 to each of two persons injured in an accident for which you are held liable, you must pay a balance over the insurance coverage equal to:

a). $10,000	c). $20,000
b). nothing	d). $40,000

10. The assigned risk plan offers:

a). Reduced insurance premiums for drivers with outstanding records.
b). Minimum coverage at high costs for drivers unable to purchase regular insurance.
c). Special rates for students who have had driver education.
d). Special risks for assigned students.

11. What kind of injury could be increased by attaching a tachometer to the steering post of your car?

a). Head injury	c). Chest injuries
b). Leg injuries	d). Spinal injuries

12. It is not a traffic policeman's responsibility to:

a). Determine penalties for traffic violations.
b). Give citations for traffic violations.
c). Investigate traffic collisions.
d). Direct traffic.

13. Suppose a driver has the chance but fails to avoid a collision triggered by someone else's action. In the resulting lawsuit the driver may be found guilty of:

a). Contributory negligence	c). Inadequate skill in emergencies
b). Poor driving attitudes	d). Failure to yield the right-of-way

14. What information should you get from the other driver if you are in a collision?

a). Names and addresses of nearest relative.
b). Name, address, driver's license number, phone number.
c). Name, rank, and serial number.
d). Name of attorney.

15. When people are seriously hurt in a crash, you should not:

a). Call the police.
b). Move them to make them more comfortable.
c). Allow them to sit in an upright position.
d). Try to give first aid.

16. The best way to control bleeding from a cut in the arm is to:

a). Use a tourniquet.
b). Apply pressure to the cut.
c). Wrap it in a bandage.
d). Require the person to lie down.

17. Which of the following is the best recommended first aid practice to follow?

a). Move all injured persons to the nearest doctor.
b). Attempt to stop all bleeding by using a tourniquet.
c). Assist slightly injured persons as they walk around.
d). Keep the injured warm and comfortable but avoid moving them.

18. Which kind of information are you NOT required to give when you are involved in an accident?

    a). Your name and address.
    b). Your driver license number.
    c). An admission that you are at fault.
    d). The license number of your car.

19. The first requirement of a person who is involved in an accident is to:

    a). Send for a doctor.
    b). Call the police.
    c). Stop at the scene of the crash.
    d). Give aid to the injured.

20. If you hit an unattended parked car you should first:

    a). Drive to the nearest police station.
    b). Leave a note that gives required information.
    c). Go looking for the owner.
    d). Drive on if the damage is slight.

21. License plates are:

    a). Needed by all motor vehicles that are driven on public roads.
    b). A source of revenue for the federal government.
    c). Issued to all licensed drivers.
    d). Not necessary for motorcycles.

22. A Certificate of Title is the same as a:

    a). Driver's license.
    b). Certificate of Registration.
    c). Certificate of Ownership
    d). Certificate of Inspection

23. Which of the following is not allowed to drive a vehicle in Washington?

    a). Residents of other states.
    b). A licensed driver from Idaho who is 15½ years old.
    c). 16 to 18-year olds.
    d). Persons who have only an instruction permit.

24. A driver in the State of Washington is required to have an endorsement on his/her driver's license:

    a). To operate a school bus.
    b). To distinguish it from an instruction permit.
    c). To drive before his/her 18th birthday.
    d). None of the above.

25. The purchaser of a vehicle must transfer the registration and title of a vehicle within:

    a). 5 days.
    b). 10 days.
    c). 15 days.
    d). Before he/she operates it on the roads in Washington.

MODULE 21: INDIVIDUAL RESPONSIBILITIES AND OPPORTUNITIES, FUEL CONSERVATION, AND SYSTEM IMPROVEMENT.

OBJECTIVE

WHEN PRESENTED WITH A SERIES OF OBJECTIVE QUESTIONS ON FUEL CONSERVATION AND FUNCTIONS OF GOVERNMENT AND PRIVATE AGENCIES CONCERNED WITH TRAFFIC SAFETY, THE STUDENT WILL RESPOND WITH 80% ACCURACY.

THE STUDENT WILL INVOLVE HIMSELF/HERSELF FOR A TOTAL OF NOT LESS THAN FIVE HOURS IN AN ACTIVITY(IES) DESIGNED TO IMPROVE THE HIGHWAY TRANSPORTATION SYSTEM, TO PROMOTE SAFETY IN THE HIGHWAY TRANSPORTATION SYSTEM, OR TO PROMOTE FUEL CONSERVATION.

CONCEPTS

Engineering: vehicle, roadway.
Enforcement: police, courts.
Education: schools, colleges, public education, safety promotion groups.
Emergency Medical Services: communication, ambulance services, medical technicians, special services (e.g., Army helicopter transport).
Fuel Conservation: issues, skills.

STUDENT LEARNING ACTIVITIES

1. Independently read textbook ____________________, pp. ____________.
2. Independently read pamphlets: "Who Needs High School Driver Education"; "Who me? Demonstrate Safety?"; "Don't be Fuelish."
3. Participate in classroom group sessions presented by:
   a). a police officer.
   b). a highway and/or traffic engineer.
   c). a person presenting on emergency medical services.
4. Independently or in a small group, identify a deficiency in the Highway Transportation System and take steps to correct the deficiency.
5. Participate in a safety group activity (for example: SAFTYE Club or Women Highway Safety Leaders activity).
6. Individually or in a small group select and carry out an activity promoting safety in the Highway Transportation System or promoting fuel conservation. Approval must be obtained for any activity not outlined in the SAFTYE Handbook.
7. Visit a traffic court while it is in session. Independently complete Worksheet W21a.
8. Independently complete Worksheet W21b and discuss your answers in small groups.
9. In a classroom group setting, view Better Mileage Driving (FS,C) and More Miles Per Gallon (FS,C).
10. In a classroom group setting, participate in teacher-led discussion on fuel conservation issues.

EVALUATION

1. Complete Evaluation E21.
2. Provide evidence of a minimum of five hours in an activity(ies) designed to improve the HTS, to promote safety in the HTS, or to promote fuel conservation.

May, 1979

Directions
(Student Learning Activity 3, Module 21)
(One Page Only)

The following are outlines of points to be made by the resource speakers noted in SLA#3. This outline should be discussed with the speaker enough in advance of the presentation so the speaker has time to prepare. (Speakers should be limited to a maximum of 30 minutes.) The speakers should be directed to leave enough time for questions from the class and clarify if he/she wants questions during or at the end of the presentation.

a). Police Officer
1. chief duties in regard to traffic patrol.
2. philosophy of applying traffic laws.
3. police officer has "service" as well as "enforcement" duties.
4. jurisdiction of various police forces -- city, county, state.
5. personal anecdotes that substantiate necessity for enforcement agencies.
6. police attitude toward young drivers and vice-versa.
7. timely issues (e.g., re radar clocking at the time when radar was declared inaccurate by Florida Judge)
8. enforcement index.
9. citation "quotas".

b). Highway and/or Traffic Engineer
1. basic tasks of an engineer in planning movement of traffic.
2. basic tasks of an engineer in designing and overseeing the building of roads.
3. criteria used for planning, constructing, and maintaining highways.
4. criteria for safe and efficient movement of traffic on existing streets.
5. how decisions are made for putting in a traffic light, making a street one-way, etc.
6. problems encountered in trying to achieve safe and efficient movement of traffic, e.g., sequencing signal lights in both directions on a heavily travelled two-way street.

c). Person presenting on Emergency Medical Services
1. What is meant by the term "Emergency Medical Services."
2. Types and numbers and locations of emergency vehicles and hospital emergency departments.
3. Communications network for EMS in the area.
4. Procedures for summoning aid.
5. Training and licensing requirements for EMS personnel.

May, 1979

NAME________________________________

WORKSHEET W21a
(Page 1 of 3 pages)

Traffic Court Report

	CHARGE	PLEA		DISPOSITION
	Note: For major charge use Page 3 (e.g., DWI, Reckless Driving, Negligent-Accident)	Guilty	Not Guilty	
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

May, 1979

WORKSHEET W21a
(Page 2 of 3 pages)

Traffic Court Report

Summary of Court Visit: (Do not limit to, but include at least some items on your overall reaction, your opinion regarding the decisions of the judge, etc. Be certain to indicate reasons for your opinions).

NAME______________________________ May, 1979

WORKSHEET W21a
(Page 3 of 3 pages)

Traffic Court Report - Major Charge
(Use a separate form for each major charge)

Charge____

____

Judge____ Date________________

Prosecuting Attorney_________________________________ Time____________

Defense Attorney______________________________________

Summary of testimony: (such as Breathalyzer reading; who testified, police officer, defendant, witness; what basically was said; etc.)

Judgment

Fine_________________________________ Suspended______________________

Jail_________________________________ Suspended______________________

Other actions: (Such as suspension of license and how long, action not completed and why, charge reduced and why, etc.)

May, 1979

WORKSHEET W21b
Fuel Conservation
(One Page Only)

After completing the exercise below, you will discuss answers in small groups of 3 to 4 students.

A: RATING GAME

This is a game of answering questions about fuel economy driving. The questions have no right or wrong answers. The answers are your personal opinions. After each question, three answers are given. Place a "1" by the one you think answers the question best, a "2" by the answer you think is second best and a "3" by your third choice.

1. Which do you think is most important in saving gasoline?
    - ___The mechanical condition of your car
    - ___Your driving habits
    - ___Speed laws
2. What would you say is the most difficult thing to do in getting better gas mileage?
    - ___Driving at steady, constant speeds
    - ___Driving at slower speeds
    - ___Keeping a light and steady foot on the gas pedal during acceleration
3. Who do you feel is to blame if gasoline is rationed?
    - ___Drivers
    - ___The government
    - ___Oil companies
4. What would you say is the best way to lower your gasoline bill?
    - ___Limiting unnecessary driving
    - ___Using your car less
    - ___Combining short errands into one trip
5. Which driving action can waste the most gas?
    - ___Making fast starts and sudden stops
    - ___Using air conditioner
    - ___Tailgating
6. Which driving action do you feel saves the most gas?
    - ___Anticipating conditions ahead
    - ___Holding a steady speed
    - ___Starting engine correctly

B. SAVE OR WASTE TEST

Decide which of these actions saves or wastes gasoline. In the blank at the left of each number, place an "S" if you think the actions saves gas and a "W" if you think it wastes gas.

___ 1. Pumping the accelerator to start the engine.
___ 2. Carrying extra weight in the car trunk.
___ 3. Reducing tire air pressure before long trips.
___ 4. Keeping gas tank as full as possible.
___ 5. Combining short shopping trips.
___ 6. Driving in freeway traffic rather than city traffic.
___ 7. Making sure your front wheels are aligned.
___ 8. Using radial tires rather than bias-ply tires.
___ 9. Idling the engine to warm it.
___10. Carrying baggage on the car roof.
___11. Braking while going uphill
___12. Tailgating the car ahead.
___13. Easing off throttle while climbing a hill.
___14. Cruising at a steady 50 mph on freeway.
___15. Racing the engine before shutting it off.
___16. Shifting into high gear as soon as possible.
___17. Checking your gas mileage regularly.
___18. Riding the brake pedal as you near traffic lights.
___19. Slowing down gradually as you near stop signs.
___20. Driving as if you had an egg between your shoe and the gas pedal.

May, 1979

TEACHER-LED DISCUSSION
(Student Learning Activity 10, Module 21)

This is intended to be a values clarification exercise aimed at getting the students to consider the seriousness of the fuel issue.

1. What reaction would you have if the Washington State Legislature passed a law as a fuel-saving measure making the minimum licensing age 18?
2. How would your life change if your family were restricted to 15 gallons of gas each week?
3. What would your reaction be if professional sports activities were limited to regional leagues and the number of games played cut to save travel?
4. If members of your family drive well over the speed limit when they think they can "get away" with it, what do you think you should do?
5. Do you think that the gas shortage is real or contrived?

June, 1979

EVALUATION: E21a
(Page 1 of 2 pages)

Directions: Write the letter of the correct answer next to the corresponding number on the answer sheet. A total of 8 points is needed to pass.

(Each question is worth 1 point)

1. What government agency is responsible for standards for vehicle safety?

   a). Each State Department of Transportation.
   b). Highway Safety Board.
   c). National Highway Traffic Safety Administration.
   d). Highway Users Federation.

2. The responsibility for resolving problems in the flow of traffic throughout the HTS is that of:

   a). Traffic Engineers.
   b). The State Patrol
   c). The Department of Licensing.
   d). Highway Engineers.

3. Most highway and traffic engineers are employed by:

   a). Private Industry.
   b). Local, State, and Federal Government.
   c). Foundations and groups such as the Highway Users Foundation.
   d). About an equal amount in each of a, b, and c.

4. To determine whether a driver is guilty of violating a law is the responsibility of:

   a). Law enforcement officials.
   b). Law administration.
   c). The courts.
   d). All of the above.

5. Carrying out required provisions for "Emergency Medical Services" is the responsibility of:

   a). The Federal Government.
   b). Local and/or County Governments.
   c). Governments at various levels in some instances and private agencies in others.
   d). State Government.

6. Does high school driver education pay off?

   a). According to the Highway User's Federation, available evidence points toward yes.
   b). According to a California survey in 1978, 3 out of 4 people thought H.S. driver education was not the best way.
   c). Nearly all studies show that H.S. driver education improves the proficiency of those drivers that take it by at least 20%.
   d). The majority of research studies shows that students who have had driver education get higher scores on the Department of Licensing tests.

7. The average fuel consumption in the United States is about:

   a). 10 MPG.
   b). 12 MPG.
   c). 14 MPG.
   d). 17 MPG.

EVALUATION: E21a
(Page 2 of 2 pages)

8. Which of the following will usually increase gas mileage?

    a). Fill the gas tank each time the gauge gets down to 1/2.
    b). If your car can use leaded gas, use premium rather than regular.
    c). In a car with a standard transmission, build up speed in lower gears.
    d). Use radial tires rather than bias belt.

9. For the most fuel economy, an engine should be shut off and restarted rather than left idling if the wait will be longer than:

    a). Fifteen seconds.
    b). Thirty seconds.
    c). One minute.
    d). Two minutes.

10. When driven at 55 MPH rather than 70 MPH, most automobiles will:

    a). Nearly double the MPG.
    b). Get about 30% more MPG.
    c). Get about 20% more MPG.
    d). Get about 10% more MPG.